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The policy and practice of inclusion of children with specific learning difficulties in mainstream primary girls' schools in Riyadh, Saudi Arabia: Exploring the attitudes and experiences of teachers

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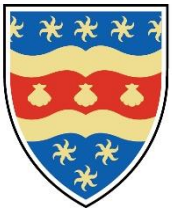

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The policy and practice of inclusion of children with specific learning difficulties in mainstream primary girls' schools in Riyadh, Saudi Arabia:

Exploring the attitudes and experiences of teachers

By

Amirah A. Alshenaifi

A thesis submitted to the University of Plymouth in partial fulfilment for the degree of

DOCTOR OF PHILOSOPHY

Plymouth Institute of Education

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Copyright Statement

DEDICATION

To my mother and the soul of my father.

To my husband Waleed and my children Reema and Suliman

Abstract

Title: *The policy and practice of inclusion of children with specific learning difficulties in mainstream primary schools in Riyadh, Saudi Arabia: exploring the attitudes and experiences of teachers.*

This research project examines the implementation of the policy and practice of inclusion in girls' primary schools of Saudi Arabia. In particular, it focuses on the work of teachers - their attitudes, beliefs, methods, and experiences - because it is they who are ultimately responsible for applying the policy by using inclusive practices in their classroom activities.

Since the 1970s many countries have adopted a policy of including in mainstream schools those children with physical or cognitive impairments, or with learning difficulties. Formerly, children with special needs or learning difficulties were segregated in 'special' schools; this process of separation caused the children and their families to feel shame and humiliation, and it often led to the children to suffer lower standards of learning. After much discussion and review of the issue, commencing in the 1970s the policy of inclusion was developed and accepted in most developed nations; this was a recognition of the inequity of segregation, an acknowledgement of the human rights of all children, and an acceptance of the need for children to enjoy the benefits of a full education within the context of the wider society

This thesis traces the development of the policy and its implementation in primary schools for girls in the city of Riyadh, Saudi Arabia. To research the topic I recruited 423 female teachers from 50 schools from across the metropolitan area. Of the participants, 214 were 'specialist' teachers: that is, they specialised in working with children who have special needs or learning difficulties. The other 209 were teachers who worked in 'mainstream' classes – classes which contained both non-impaired children and special-needs children. The project consisted of a quantitative survey in the form of a questionnaire, and a qualitative component in the form of semi-structures interviews with 23 of the teachers.

A central conclusion from this enquiry is that inclusion has not yet been achieved. Girls with physical or cognitive impairments are being integrated into mainstream classes – but full inclusion has not yet been accomplished. There are several possible explanations for this: first, the policy is relatively new and so many mainstream teachers have had limited experience of working with special-needs children. Second, the policy and its implications

are not fully comprehended by all teachers. Third, the training of teachers has not always been adequate. A fourth explanation concerns the practicalities of including children who may exhibit a very wide range of impairments. It is apparent that there is a disjunction between the philosophy and the implementation of inclusion. That is, the principle and policy are noble and desirable, the philosophy of inclusion being endorsed by teachers, but in practice it is very difficult to implement.

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Author's Declaration

At no time during the registration for the degree of Doctor of Philosophy has the author been registered for any other University award without prior agreement of the Doctoral College Quality Sub-Committee.

Work submitted for this research degree at the University of Plymouth has not formed part of any other degree either at the University of Plymouth or at another establishment.

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Chapter 1: Introduction

1.1 Background:

The issue being addressed in this study is the implementation of the policy and practice of inclusion in primary schools of Saudi Arabia. Specifically, it seeks to identify the attitudes, beliefs, and experiences of teachers because it is they who are ultimately responsible for applying the policy.

Since the 1970s many countries have adopted a policy of including in mainstream schools those children with physical impairments, cognitive impairments, or with specific learning difficulties (See for example, *Salamanca Statement,* UNESCO, 1994: Blandul, 2010). Prior to this policy being developed, children with special needs or learning difficulties were separated from mainstream children, instead being taught in 'special' schools. This was a form of segregation and as such it was a cause of stigma and humiliation for the children and their families, and it often led to lower standards of learning by the children (Black-Hawkins *et al* 2007: Baker *et al* 1995: Konza 2008: Berg 2004: Lamport 2012). The adoption of a policy of inclusion has been a recognition of the human rights of all children as well as an acknowledgement of the need for children to enjoy the benefits of a full education and to be part of the wider society (Konza, 2008).

For the purposes of this research 'inclusion' will be defined as the practice of providing equality of opportunity by meeting the needs of all children within a mainstream setting .The reasons for this definition will emerge from discussions of the concept of inclusion and the development of inclusion in Saudi Arabia. This research project stems from the belief that inclusion is a fundamental human right which benefits all - children, families, and society as a whole. This standpoint draws from literature on the advantages provided by inclusion, many writers confirming that children benefit by enjoying full involvement in the activities of mainstream classes (Berg, 2004: Lamport, 2012). The project focused on the extent to which the policy is being implemented in Saudi Arabia, and on the benefits and challenges as perceived by both the mainstream teachers and the teachers who specialise in working with children who have physical or cognitive impairments, or who have specific learning difficulties. It does not seek to provide a definitive quantitative evaluation of the success or otherwise of the practice of inclusion because in Saudi Arabia this arrangement is relatively new; however, this study is critical to understanding the progress of implementation and to

identifying current benefits and barriers. Rather, the emphasis is on the experiences and attitudes of the teachers because they are the ones responsible for applying the policy in the schools and classrooms. Moreover, it should be explained that in Saudi Arabian society the privacy of children and families is very important, and studies into the educational progress of individual students would be regarded as intrusive and unacceptable.

The policy of inclusion (defined and explained below) has been adopted in most developed nations, but the process of implementation has been varied and has met with mixed success. The policy of inclusion has been a major turning point in education and it has had far-reaching implications for all concerned. To apply the policy it has been necessary to modify curricula and provide suitable facilities within school precincts: but, more importantly, teachers have had to be trained so that they have the skills and knowledge to teach children who exhibit a broad range of learning abilities and with varying physical conditions. The policy was adopted in Saudi Arabia in ٢٠٠٤ and since then there have been considerable changes to the ways in which schools and classes are organised, particular attention being given to the pre-service and in-service training of both teachers of children with special needs and teachers of mainstream classes (Al Mousa *et al*., 2008). It is the teachers who have the primary responsibility for applying the policy of inclusion and for ensuring its success; yet this entails not just their teaching skills but also their behaviour towards their students and the attitudes and beliefs of teachers in regard to the policy.

In several countries, such as the US and the UK, the principle of inclusion evolved steadily during and after the 1970s, but it took some time for it to be adopted as an educational policy, and it has taken even longer for it to be implemented (Hall 2002: Dudley-Marling & Burns, 2014: Konza, 2008). In the decades since the 1970s a number of studies in different countries have examined both the policy and its application; however, relatively little research has been conducted on aspects of the policy in Saudi Arabia and so this project provides an important review of the issue. The relevance and importance of this study is that it examines the policy of inclusion and its implementation in Saudi Arabia, and it places the experiences of Saudi Arabia within a global context.

1.2 Terms:

It is important at the outset to clarify the main terms used in this study.

In writing this thesis I acknowledge the importance of using terms which are impartial, non-judgmental, non-discriminatory, and acceptable to all readers. In the USA the term commonly used in inclusive literature is 'Special Needs Education', and in the UK it is 'Special Educational Needs'. The latter term has been used in all recent UK legislation (e.g. *Special Educational Needs and Disability Act [Northern Ireland] 2016)*, and in the many papers and official reports on the subject. 'Special Educational Needs' is a broad term intended to encompass the spectrum of medical, neurological, genetic, psychological, and physical conditions which may impede a child's learning. Florian (2007, pp 9-10) explains that 'special needs education' is a general term which refers to forms of educational intervention and support designed to assist students with particular needs. She continues: *Whether the term special education, special needs education or something else is used there is a common understanding that it involves something 'different from' or 'additional to' that which is generally available to others of similar age in schools. The concept of special educational needs is broad, extending beyond categories of disability, to include all children who are in need of additional support.*

When writing on this subject it is very difficult to identify terms that are entirely neutral; that is, words and expressions which are totally free of any negative meanings or associations. The two commonly-used terms for referring to children with physical conditions or other impairments are Special Educational Needs (SEN) or Specific Learning Difficulties (SPLD). The former (SEN) usually refers to a very wide range of conditions which may hamper a child's ability to learn. The conditions can vary in nature and severity, and they can be caused by physical conditions, communications disorders, emotional difficulties, behavioral disorders, and developmental impairments (Farrell, 2003). The latter term (SPLD) is often used to describe children who have learning needs in a specific area, such as dyslexia (difficulty with reading) and dyscalculia (difficulty with numbers). In the light of these comments the term which I have adopted for use in this thesis has been Special Educational Needs (SEN), and this is also appropriate since this project was undertaken, and examined, in the United Kingdom.

In writing, this I am also aware that words such as ‘impairment’, ‘disorder’, and ‘disability’ can have negative connotations: nevertheless, based on the works of writers such as Florian (2007), Farrell (2003) and on common legal and medical usage, I have used both SEN and SPLD throughout this thesis. Indeed, it should be noted that I have used these two terms (together with other words such as ‘impairment’) interchangeably. I have done so because although I am aware of the sensitivity required when using various words, the repeated use of SEN in each paragraph would strain the patience of the reader. Moreover, the central concern of this work is not particular educational needs but rather the issues relating to inclusion.

It must be repeated here that the concept and policy of educational inclusion evolved over about five decades. Just what inclusion entailed, how it could be implemented, and the philosophical basis were the subject of much academic and public debate which has been characterised by uncertainties and contradictions. Indeed it has long been a disputed issue, there being considerable confusion and disagreement over terms and their meanings. However, in many jurisdictions these issues seem to be settled so that now in educational settings the term ‘inclusion’ is used in preference to either ‘assimilation’ or ‘integration’ (Jones, 2001: Farrell, 2003: Florian, 2007). These latter terms indicate that children may be present in a classroom, but still they may not be involved in all class activities. ‘Inclusion’ is the term used and favoured by most writers on this subject and by the educational systems of many countries, and it refers to full participation by children with special educational needs in all (or most) learning activities. Similarly, the term is being applied not just to individual schools and classrooms but also to entire educational systems. In this latter sense it now describes school systems which have eliminated any forms of segregation, replacing them with arrangements whereby all children, regardless of needs, can attend equally with their peers.

1.3 Background Concept and Philosophy of Inclusion:

How best to educate children who have special needs has been the subject of much research and many learned papers. Numerous writers have addressed the issue of how to describe and define special needs, and there have been many that addressed the philosophical, pedagogical, ethical, and moral aspects of this matter. In general, it has become accepted that segregation has been psychologically, socially, and educationally harmful, and also a denial of the children’s human rights (Farrell, 2003: Ho, 2004: Blandul, 2010: Konza, 2008). Instead, inclusion has been widely adopted as a more equitable way of treating and educating all

children. But changes have come slowly; a number of theories relating to disadvantage and disability have been considered, and there has been considerable discussion regarding the models of inclusion which could be applied and the various terms and descriptions of disability. For example, British educational sociologists, such as Tomlinson (1982), and educational psychologists, such as Booth (1981), challenged the prevailing system of segregated special education, arguing that the system was unable to provide an adequate or suitable education for everyone. Others, such as Oliver (1990: 1996), used a sociological approach to encourage experts in the field of education to examine disability in the context of social theory and to explore the concept of oppression.

A social model of disability developed by Oliver (1990: 1996) listed criteria for disability, and these works provided an important foundation for disability politics in Britain. Oliver (1996) stated that in Britain – and indeed in most societies, including Saudi Arabia - the physically impaired were also socially and culturally incapacitated because to a large degree they were excluded from full participation in society. He described the disabled as an oppressed group in society, which is why it was essential to understand the difference between physical impairment and the social situation classified as disability. 'Impairment' is usually categorised as missing a limb, or having a defective limb or organ (Jones 2001: Ho, 2004: Hughes & Paterson, 2007). On the other hand, 'disability' refers to the restriction created by society on people who have a physical impairment and so are excluded from involvement in normal social activities. On this basis, in Britain, as in most/all other countries, people with a physical incapacity were also disabled insofar as they were socially marginalised and oppressed. The distinction is based on the 'impairments' of people, and oppression is their experience. Indeed, Oliver (1996) described disability not as a deficiency but as a form of social exclusion – even subjugation.

Integration seemed to offer some solution to the issue of segregation, but whereas 'educational integration' describes a situation in which a child with educational needs attends a mainstream class and adapts to the activities of that class, 'inclusion' is a word that describes a system that adapts to the needs of the student. This entails the creation of an accessible environment and alternative learning environment with accessible formats. Inclusion is a model which acknowledges the problems faced by disabled people because until recently societies have been structured in ways that excluded the disabled from social activity, participation, and education (Oliver, 1990: Frederickson *et al*, 2010).

Barton (2003) stated that dissatisfaction with the medical model instead led to the focus on social factors and on the cultural inequalities within society. The medical model viewed disability as a problem for the disabled individual, but the social model of disability had a very different interpretation and a different emphasis. It was more empowering as it argued that society disabled individuals because their needs were not taken into account (Hughes & Paterson, 2007). This acknowledgment within the social model was important because it led to the removal of the disabling barriers and made society responsible for ensuring that individuals with a disability have the opportunity to participate in all facets of society, including education. The social model provided a more inclusive approach and led to more proactive thinking which has allowed people with disabilities to participate more equally with the rest of the community (Jones 2001: Hughes & Paterson, 2007: Frederickson *et al*, 2010).

Lipsky and Gartner (1998) explained that inclusion is not just limited to placing students with SEN in general education classrooms; rather, it guarantees a child's right to participate in all school activities. This concept seeks to eliminate special schools or classrooms and emphasises full participation (as far as possible) by students with disabilities. Power, Defur and Orelove (1997) defined inclusive education in terms of providing children with SPLD equal access to mainstream education classrooms plus appropriate support for the students to facilitate their inclusivity, and this was not limited to the classroom but extended to all aspects of schools and their facilities – and even to local school districts.

Inclusive education is a part of the human rights approach to social relations, the aim being to create an integral vision for the whole society (Barton, 1997). Education plays a crucial role in the development of an inclusive society, which is why it is very important. Moreover, the inclusive education approach is not just about special teachers teaching SPLD students in regular schools, and it is not about just placing students in classrooms with their non-disabled peer. Inclusive education seeks to educate all students and explore all the related issues – the barriers, benefits, and consequences (Berg, 2004).

Inclusion has wider ramifications than just access to school classes, writers such as Jones (2004) arguing that inclusion is a philosophy of respect for all individuals within a common educational and societal agenda. Jones (2004) also points out that inclusion recognizes some differentiated treatment for children with SEN as they tend to be different from their peers, and the inclusive paradigm is based on celebrating differences instead of negatively classifying, labelling, and segregating children. Inclusion is concerned with developing

communications and outlooks towards diversity and differences within social groups. Inclusion is about recognising and accepting individuals without making any child or group of children feel less valued than the rest. The advocates of inclusive education visualise an educational setting where children can learn alongside their normal peers and where they can socialise and befriend others regardless of their individual differences.

The concept of inclusion goes beyond the restricting factors in classrooms and looks to incorporate families, staff, and community in local schools. Inclusive education must incorporate equity, participation, community, compassion, and respect for diversity. Booth (2005) and Scanlon (2013) have conceptualised inclusion as increasing participation and eliminating exclusion from syllabuses, culture, and local educational communities. The aim is to develop educational settings that can respond to diversity and which value all students and staff on an equal footing. Inclusive education should recognise the rights of children to a broad education and their rights to an education at their local schools.

A number of writers (Jones, 2001: Nilholm, 2006: Konza, 2008: Kiviruama *et al*. 2006) have pointed out that the emergence of inclusion as a guiding principle resulted from the failure of concepts such as integration and assimilation, and from the emergence of human rights as applied to children. These concepts were used in multiple ways that led to some confusion, but the emergence of inclusion introduced radical changes and it implied changes to the overall system rather than just its components. The inclusion paradigm shows that the organisation of schools should take account of the reality that children are different and that differences must be viewed as natural. Moreover, it is the responsibility of schools to adapt to those differences rather than have the children adapt to existing school systems. The *Salamanca Statement* (UNESCO, 1994) launched the democratic ideal of inclusion, which has subsequently become a global issue. This ideal stated that the differences between children must be valued and these differences must be seen as a natural condition in schools. Inclusion should be applied at the classroom level, and that implies that all kinds of children should be in the same classes. This concept urges that diversity must be celebrated within the classroom setting so all children have a right to participate, to learn, and to nurture social relationships (Berg, 2004: Lamport 2012).

Fong and McBrayer (2012) and Farrell (2003) have explained that integration refers to supporting students with special needs in the standard curriculum. They do not suggest that the curriculum should be diluted or diminished in any way; rather they state that assistance may be in the form of different teaching methods, additional tuition, or specially-adapted learning

materials. This is similar to the American concept of mainstreaming that was enacted in 1975 (Berg, 2004). The idea of mainstreaming integration was that children with SPLD should start in a special educational environment and then qualify to attend a general educational environment by demonstrating that they can handle the workload in a general classroom. Inclusion, on the other hand, views disabled children as belonging in mainstream classrooms, but they can be excluded only if services which are better suited to their specific needs are provided elsewhere. Inclusion posits that students with special needs should be supported, thus empowering them to participate fully in a school community.

The notion of 'impaired' children having needs which could be met only in segregated institutions was challenged by some writers, such as Barton (1997) and Jones (2001), who argued that the constant use of the term 'special' undermined the development of a critical evaluation of inclusion, and that the provision of special schools was hampering the development of inclusive education (Berg, 2005). The concept of 'special needs' led to powerlessness of disabled students; moreover, it fostered attitudes of pity and prejudice towards them. Other aspects of disability concern the central tenets of an inclusive society; that is the issues of social justice, impartiality, equality, and democratic participation (Konza, 2008). An inclusive society incorporates all previously-discriminated groups, and it seeks to confront all types of oppression. Within educational settings, inclusivity seeks to respond positively to diversity, to empower all members in ways that celebrate differences.

However, in recent years there has been recognition in a number of countries that inclusive ideals have not necessarily led to children's rights to participate, to learn, and to nurture social relationships, especially where children have severe or multiple special educational needs (Norwich, 2008). This failure of implementation is evident in the closure of special schools and the incomplete process of inclusion in some mainstream classes. Such realities have led to increased acknowledgement that specialist skills and expertise will always be needed by some learners to allow them to have equity of learning opportunity, and this can only be provided by offering a continuum of support within learning communities. (International Conference on Education, 2008; UNESCO Policy Guidelines, 2009). Such approaches have been described as inclusive systems or communities where the emphasis is on equity of rights across a community, rather than the necessity of all learners being educated in the same place. Linked to this is the recognition that an inclusive system can have a shared ethos across a continuum of flexible provision including different types of settings and different kinds of support within settings. In this model, for example, children can attend

special schools or mainstream schools, or be supported by resource bases within mainstream schools and in so doing still be part of a collaborative community which strives to find the best way to foster high quality education, respect, and participation (European Agency for Development in Special Needs Education, 2012).

This study focuses on the development and implementation of inclusive education in Saudi Arabia. Writing in 2012, Alquraini stated that many Saudi students with disabilities were still educated in special schools because their unique needs could not be accommodated in conjunction with their typically-developing peers in public schools. Consequently, many impaired learners were still unable to improve their social, communication, and academic skills. Alquraini (2012) also explained that the main barriers were teachers' perceptions regarding inclusion of students with severe disabilities. However, Saudi Arabia has specific legislation for people with disabilities, that legislation stating that disabled individuals have equal rights in society (*Document of the Rules*. Saudi Ministry of Education, 2002). The legislation in Saudi Arabia has evolved over the past few decades, and it ensures that the government provides disabled individuals with complete access to free medical, psychological, social, educational and rehabilitation services (Al Mousa *et al*, 2008: Gaad, 2011). This legislation is defined in *The Regulations of Special Education Programs and Institutes* (٢٠٠٢) and is a specific policy for the education of students with disabilities. The policy and regulations were modelled on US policies (Alquraini, 2013).

This research traces and evaluates the development of inclusive education in Western countries in order to understand the evolution of this principle, to better comprehend the challenges of inclusion in the Saudi educational setting, and to consider the Saudi experience within a global setting. My own standpoint is that the philosophical and ethical foundations for the creation of an inclusive society are social justice, equity, and democratic participation (Barnes, 1996). The barriers to realising an inclusive society must be realised and identified so they can be challenged and eliminated. Thus, based on this argument no one should be left out of school. Inclusive education is based on the human rights approach to social relations. Therefore, the concept of inclusion has some wider implications, and inclusion is a continuing process of improvement which seeks to explore how best to accommodate all individuals.

Barnes (1993) states that it is the teachers who must take the lead in implementing inclusion by encouraging children's participation in the classroom to facilitate collaborative

involvement. However, some students with disabilities may face problems participating in particular activities, and some will need assistance to engage in dialogue with other children. This is an important matter because as Barnes (1993) and Lamport (2012) explain, some students with SPLD have difficulty associating with other children because of their limited verbal skills and thus are less engaged in social interaction than their mainstream peers.

Swain and Cook (2001) describe how the notion of inclusion is now focusing on the process of making conventional schools easier to access for children with disabilities in terms of curriculum and learning. Moreover, critiques of special education have been based on sociological analysis from the social model of disability espoused by the Disabled People's Movement. This model asserts that an inclusive school is not a conventional school where selected disabled students are integrated; instead it is an inclusive school that is neither selective, exclusive, nor rejecting - it is open to all. As described above, inclusion is not merely the passive acceptance of special-needs children into mainstream classes; rather it is positive in tone and insists on the celebration of difference.

The inclusion agenda has been a global movement (Sebba & Aniscow, 1996). The philosophy and the practicalities of inclusion have been debated and developed widely over several decades (Blandul, 2010). Indeed, these discussions are on-going, and this research project is part of global and national processes of review and reform. Various international forums have issued declarations and recommendations, and introduced various programs to encourage equal access for students with special needs. But of major importance was the landmark international agreement which enunciated the principle of inclusion; the *Salamanca Statement on Principles, Policy, and Practices in Special Needs Education* (1994). This was accompanied by UNESCO's Article 2.4 (1994), which stated that students with special educational needs have the right to education in mainstream schools. The Article confirmed that mainstream schools must be able to accommodate such students by devising a child-centred pedagogy that can realize the needs of students with SPLD. In response, many governments around the world have initiated policies to implement the inclusion agenda (Black-Hawkins *et al*., 2007). An important point to be noted here is that, as Al Mousa (2008) explains, events in Saudi Arabia were rather different from most other countries. That is, in Saudi Arabia the education of disabled children started in regular schools in the early 1900s and it was only later that the children were segregated into separate schools. But the practice of segregation was reversed again, initially in the 1980s when tentative steps were taken towards re-integration. However, it was in the years after 1996 that steps were taken for

mainstreaming; at that time, the Ministry put forward an educational strategy which focused on activating the role of public schools in the education of all children in regular classes (Al Mousa *et al*, 2008). Since then the process of integration has continued, though neither full integration nor full inclusion have yet been achieved in all schools in all districts.

1.4 Statement of the problem:

This research critically evaluates the implementation of inclusive education in primary schools in Saudi Arabia. At present the educational authorities in Saudi Arabia are continuing the task of integrating students with SPLD into mainstream classes, but fully inclusive education is still relatively new. Consequently, the problem being addressed in this research is the extent to which the policy of inclusion is being implemented, and the benefits and challenges that are emerging as the implementation process develops. To examine the problem in some detail the focus of the research is on the experiences, attitudes, and beliefs of the teachers responsible for applying the policy; that is, the mainstream teachers and the special-education teachers (Avramidis, Bayliss, & Burden, 2000). Also, this investigation seeks to identify the barriers, challenges, and benefits of inclusion as perceived by the teachers, and the relevant training provided to teachers both prior to service and while in service. This research likewise aims to identify the main factors that shape teachers' views and experiences, because these, in turn, can influence the effectiveness of the implementation of inclusive education.

1.5 Significance of the Study:

This work is significant because it provides an important evaluation of the implementation of inclusion. Few such studies have been undertaken in Saudi Arabia, and very few have sought primary data and information from the teachers responsible for the application of the policy. The emphasis of this enquiry is the primary-school teachers in Riyadh, though for the purpose of comparison reference is made to developments in other countries too. The findings of this project particularly build on the work of researchers and authors such as Avramidis and Norwich (2002), Alghazo and Gaad (2004), and Gaad (2004). Previous studies on the subject of inclusion have lacked a specific focus (Alsamade 2008: Alothman, 2009), and although the work by Algahtani (2003) was useful it examined only selected disabilities, such as visual impairment.

There is a need in Saudi Arabia for inclusion through the development of a school-based education model that is focused on the needs of each student. The main category of special needs in Saudi Arabia is broadly described as 'specific learning disability', the most

common being dyslexia. However, the current project did not focus on one specific learning disability, instead looking at the overall process of inclusion as well as the perceived benefits and obstacles to inclusion. In Saudi primary school's classes are open to all students, though, depending on the nature and severity of the disability those with special needs may, at times, be allocated to a room called the 'resource room', which is staffed by teachers who can offer specific attention to each child on an individual basis. In the light of the findings detailed in the Results chapter below, this study makes some recommendations on the further development of inclusive education by endorsing a constructive approach to teacher-training for inclusive education (Gaad, 2011).

1.6 Research Questions:

In response to the background information provided above, the emphasis of this research is on the implementation of inclusion as reported by female mainstream and special-needs primary teachers responsible for applying the policy in the city of Riyadh. The questions being addressed are as follows:

- What are the attitudes and views of teachers towards inclusion?
- Based on the experiences and views of teachers, what are the advantages and disadvantages of inclusion, and what are the barriers to full inclusion?
- What are the experiences and views of teachers regarding the advantages and disadvantages for children with special needs of being in the resource room and/or the mainstream class?

Chapter 2: Review of the Literature

2.1 Introduction:

During the past four decades, much has been written on the subject of inclusion, however relatively few reports have examined this issue in regard to its implementation in Saudi Arabia. This chapter examines literature from both Western researchers and Saudi writers who have examined the issue of inclusion – and, in particular, the issue of teachers as agents for inclusion. The first section outlines the historical development of the concepts and

philosophical basis of inclusion, with an emphasis on the principles of equity, participation, human rights, and diversity. Then follows an analysis of the various models which have been proposed; this discussion considers the strengths and shortcomings of such paradigms as the social, medical, and rights-based views of inclusion. The ideas of inclusion, integration, and assimilation in education are reviewed, the important differences being highlighted. Finally, the educational system in Saudi Arabia is detailed, and the progress to date of inclusive policies and practices are explained. This section also examines the main pedagogical aspects of inclusion, and it sets the Saudi Arabian experience within a wider global context of educational change.

So much has been written on the subject of educational inclusion that it was necessary to be selective. The criteria for selecting literature were as follows.

Initially, I sought literature from various developed nations which had introduced policies of inclusion. The reason for this focus was that countries such as the UK and the USA had for several decades wrestled with the issues of what constituted inclusion and how it could be implemented. By about the 1990s these and similar societies had introduced inclusive practices so that much could be learned from their experiences. My primary focus at first was to research the concepts, principles, and associated philosophical aspects of inclusion in order to establish a theoretical framework for my project, most of the literature on these points being obtained from Western writers.

As much as possible I used literature since 2000; while that date was arbitrary, it meant that I could concentrate my enquiry on a manageable number of sources; equally important, by about that date the ideas and policies concerning inclusion had matured and become widely accepted.

Secondly, I sought literature from researchers who had investigated the implementation of inclusive practices. There are numerous studies from Western writers, fewer from Saudi Arabia and nearby Middle Eastern countries.

Thirdly, I required examples of relevant social and educational research using different methodologies. This entailed learning about the merits of different research approaches and considering which would best enable me to answer my questions.

Fourthly, I aimed to locate non-research literature from other sources such as government reports, international protocols, and educational institutions. While providing very useful background information, they proved of limited immediate benefit to the conduct of my study.

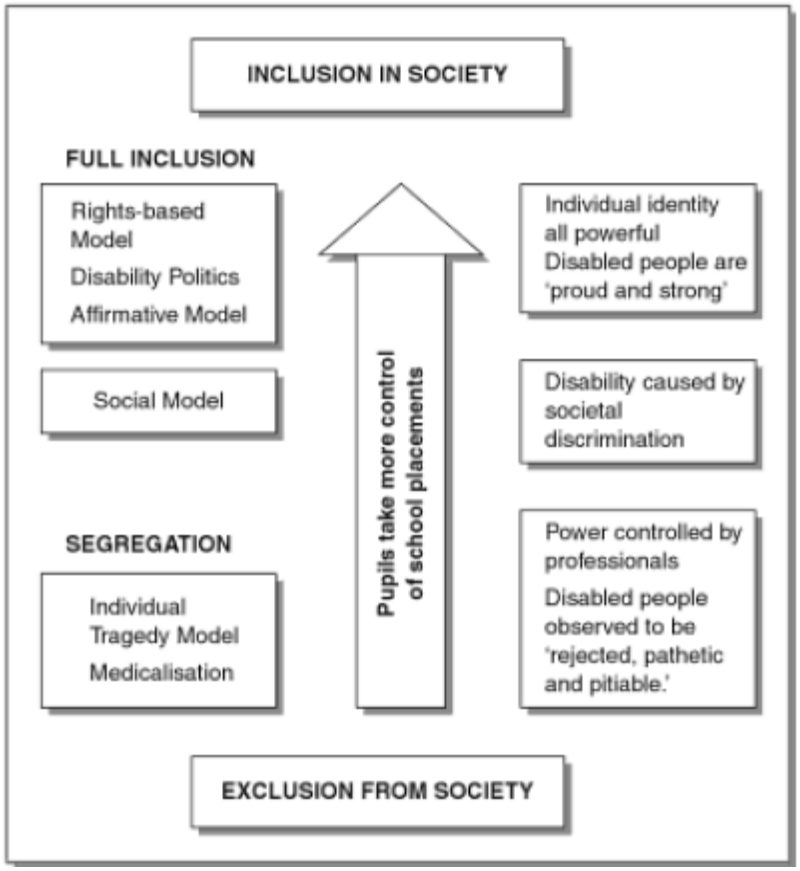
It was in the 1960s and 1970s that in many developed countries increasing attention was given to the problem of educational segregation, and there was talk of reform - but just what changes would take place and how inclusion could be implemented was initially unclear (Hall, 2002: Vislie, 2003). One important change in attitude and philosophy was the notion that all children have the right to schooling, and this applied to children with impairments too. As part of this proposal it was considered that integration could be achieved if all children, including those with disabilities, could attend local mainstream schools. Another element in the process of integration was the expected reorganisation of the overall education system and the related changes in the identification of students, financial issues, and school organisational structures. However, as noted above, the concept of inclusion has a broader vision than mere integration. Inclusion does not focus on individuals or small groups of pupils; rather it is an all-encompassing notion which aims to identify the processes by which classes and schools are conducted so as to enable such reforms to be implemented. But to implement such a concept has far-reaching ramifications and entails restructuring the curriculum, modifying teaching practices, and adjusting the physical fabric of school facilities to suit all pupils.

Social changes, and accompanying changes in attitudes, often come slowly, and it took considerable time for the inequities of segregation of children to be recognised and for new approaches to the treatment and education of impaired children to be developed. The notion of inclusion, and the practical implications of full inclusion, took time to evolve amid much controversy (Skidmore, 1996). The initial educational discourse on the education of SEN children focused on the settings suitable for their learning, much attention being given to the debates about integration versus segregation. For instance, Barton (1998) argued that changes to the prevailing educational arrangements had a wide range of educational, political, social and economic implications, asserting that inclusive education requires serious changes in the social conditions and relations in which schools exist (Barton, 1998: Oliver & Barnes, 2010).

But how individual's impediments should be viewed and classified was, for a time, an obstacle to the debates, Hodkinson and Vickerman (2009) stating that special and inclusive education can be viewed from a number of differing perspectives. The main models included the medical approach which located children's disability and needs within their individual

pathology. The social model is rather different, instead positing that the disability emanates from social beliefs and values that reinforce social marginalisation of minority groups.

2.1.1 Models of SEN and Inclusion:



Source: Hodkinson and Vickerman, 2009, p.17

The above diagram illustrates in a generalised fashion the issues and approaches to be considered in the process of moving concepts and attitudes to impairments from full exclusion to full inclusion. Hodkinson and Vickerman (2009), among others, fostered an approach to disability rights that rejected the politics and practices of segregation in education. According to the rights-based model which they espouse, all children should attend local mainstream schools that embrace the concept of 'Least Restrictive Environment'. The human-rights concept argues that all children have the right to study together and there should be no segregation regardless of learning difficulty or disability

Thornton and Underwood (2013) stated that the disability discourse has two main components pertaining to inclusive education. One is the individual experience of disability regardless of whether the disability stems from biological or from social conditions. The other

entails the socio-political interpretation of disability; that is, the individual's experiences are influenced by the socio-political climate as social and political agendas respond to the advocacy of equal recognition, emancipation, and non-discriminatory treatment of individuals with disabilities. According to the World Health Organisation and the International Classification of Functioning Disability and Health (WHO-ICF), disability can be understood as an interplay between society and the individual. Education is a means of entering the workforce but it is also a mechanism for the holistic development of individuals, this perspective being evident in international frameworks and policy guidelines for inclusive education. For example, the *UN Convention on the Rights of Persons with Disabilities* stated that persons with disabilities have a right to access an inclusive, quality, free primary and secondary education on the same basis as all other people (O'Reilly, 2003).

2.2 Integration and Inclusion:

However, as briefly noted above, there is a difference between a child with disabilities in a regular classroom and a program that has implemented inclusive education. Integration is concerned with the placement of SEN students in a regular classroom, but merely locating a child in a mainstream class may achieve little without the required support to enable the child to access the full curriculum. Integration is only concerned with the placement of students with special education needs in regular classrooms; it may not address individual needs. This strategy is not usually coupled with program changes, nor with a modified curriculum or appropriate teaching and learning strategies. Inclusion, on the other hand, is more than mere placement; it is a process that involves identification of obstacles, removal of barriers, participation, collaboration, and achievement of all students (Siegel, 1999: Porter, 2002: Hornby, 2012). Full inclusion entails the acceptance of all children into their neighbourhood schools which can adapt to support their learning regardless of the nature or severity of their disabilities. Inclusion is not just concerned with who is to be educated but it can view as part of a broader social movement that aims to eliminate exclusion in all forms, but especially in education. Inclusion is an ethical project that begins with challenging the attitudes and habits concerning the differences associated with disabilities. Educational institutions represent societal attitudes to individuals and this is particularly evident in regard to individual differences and disabilities. Thus, education plays an instrumental role in challenging discriminatory attitudes towards people with disabilities (Thornton and Underwood 2013).

The social model of disability was based on the notion that individuals are not disabled functionally by their impairments but by the external barriers that prohibited their full participation in society (Anastasiou & Kauffman, 2013). Barton (1998) argued that the social model approach has been crucial in changing the education system to a more inclusive system because it highlighted the social constraints rather than the physical barriers faced by people with impairments. In respect to education, the established barriers to full participation in education needed to be identified, and these included the school organisation, the curriculum, pedagogy, and assessment practices, all of which have had to be considered in the struggle for inclusivity (Barton, 1998).

More recently, Polat (2011) has stated that there has been a substantial change in the educational discourse, and after it became acknowledged that the exclusion of disabled learners was unfair and outdated it was replaced in Western countries in the 1980s by the concept of integration. This alternative favoured the attendance of disabled learners in mainstream schools so they could work along their non-impaired peers. However, this initiative, while well-meaning, failed to foresee, or to provide, the relevant supports that would have enabled full participation of impaired learners.

Integration of impaired learners took a number of forms that extended from part-time segregation in special schools and part-time attendance at regular schools to full placement in conventional schools (Lerner, 2000: Porter, 2002). Under this arrangement SEN children were occasionally withdrawn from mainstream classes and re-segregated in special classes for particular group activities. This scenario illustrates the difference between integration and inclusion, and though these terms are sometimes used interchangeably there is a considerable difference between them in terms of their values and practices. Integration posits partial or full physical placement of disabled students in conventional schools. On the other hand, inclusion goes beyond physical presence and entails the processes of changing values, attitudes, policies and practices within a school setting and society at large.

Freeman and Alkin (2000) have stated that there has been a public debate for a number of years on how best to create the most appropriate environment for children with disabilities. Some have debated that the special segregated schools have advantages such as trained teachers, auxiliary services, functional-skills curricula, and individualised instructional materials. Indeed, there have been concerns that some SEN children may experience frustration in a general education setting among non-impaired peers who are more sociable and academically sound (Porter, 2002). A contrary view advocates the inclusion of disabled

children as it provides social benefits such as positive modelling which may lead to better academic performance through exposure to peers.

Not all writers and researchers agree on the benefits of inclusion for all in mainstream settings. For instance, Erten and Savage (2012) stated that the concept of inclusion is too idealistic and impractical. They argue that SEN children cannot get proper educational services in regular classrooms because special educational assistance identifies those who require more specialised forms of invention, thus making them appear different in their own eyes and in the eyes of others. The supporters of inclusive education for all in mainstream schools state that special schools limit the opportunities of students throughout their life and construct categories of impairment. For writers such as Landorf and Nevin (2007) inclusive education seeks to transform special education based on ideals of social justice, since traditionally exclusion has restricted access to the general education curriculum. The rationale for inclusive education is based on the rights and ethics discourses that criticise the dual education system as a barrier to systemic changes. Furthermore, the special-education model has been criticised on the grounds that it fails to promote student learning and creates even more obstacles and disadvantages, such as segregation and labelling (Ho, 2004).

The idea of an inclusive community strives to address these issues by being more flexible and practical in acknowledging diversity of children and the need for a range of connected sources within a broader educational system. System-level approaches in a number of countries have led to the consideration of the roles of educators in a range of connected settings including special provisions, and this necessarily has implications for wider policies. Underlying such approaches is the recognition that access to specialist practitioners and resources is not in itself problematic if it can be done within a system which acknowledges the rights of all children to equality of educational opportunity (Ainscow and Miles, 2009)

It has been theorised that inclusive educational settings promote the social competence of children who have intellectual disabilities; that is, SEN children can develop appropriate social behaviour in an inclusive educational setting (Hornby, 2012). Also, that inclusive schools offer a richer social and language environment which allows for the development of friendship with peers, and this enhances opportunities for social interactions at home and in school. Conversely, some view the segregated educational system as offering advantages such as small classes, specialist teachers, individualised instruction, and an emphasis on functional life skills (Hardinman *et al*, 2009).

Barton (1998) and Clough and Corbett (2000) perceive inclusion as a process through which the existing systems will have to change. This is a process by which schools and colleges modify their curricula and their facilities to ensure involvement of all students irrespective of their abilities. Real inclusion can only be evident when genuine opportunities are available for all students.

2.3 Understanding Inclusion: issues and points of contention

Despite the steady refinement and conceptual development of inclusion it has not been always been fully implemented. Article 26 of the *Universal Declaration of Human Rights* by the UN declared inclusive education as a human right, and subsequently the on-going efforts to secure basic education for all led to a number of key international declarations, the most notable being: the *World Program of Action Concerning Disabled Persons* (UN, 1982): the *Convention on the Rights of the Child* (UN, 1989): The *World Declaration of Education for All* (World Conference on Education for All, 1990): *Salamanca Statement and Framework of Action on Special Needs Education* (World Conference on Special Needs Education, 1994): *Dakar Framework for Action* (World Education Forum, 2000): *Education for All* (EFA): *Education for Persons with Disabilities: Towards Inclusion* (UNESCO, 2001): and the *Convention on the Rights of Persons with Disabilities* (UN, 2007: Polat, 2011).

Polat (2011) argued that inclusion is a way of life that is built on values that aim to take full advantage of the participation of everyone in society and in education by minimising exclusionary and discriminatory practices. However, the definition and practice of inclusive education can vary between cultures and educational systems - and also within cultures and educational systems. Booth *et al* (2006) have pointed out that there is no universally-accepted definition of inclusion, and this lack of agreement makes it imperative to clarify the meaning of inclusive education as a means of shaping an inclusive society at large. Inclusive education is not confined to inclusion of young disabled children; inclusion encompasses all people regardless of race, ethnicity, disability, gender, sexual orientation language, socio-economic status and other aspects of identity that may be perceived as different (Lerner, 2000: Hodkinson & Vickerman, 2009: Hornby, 2012). The convention titled 'Education for All' (EFA, 1990) was an initiative that aimed to realise an inclusive and equitable society that can accommodate a broad range of diversities apart from physical or cognitive disabilities. The EFA is a human rights approach that requires engagement with issues of social justice equity and participatory democracy.

The philosophy regarding inclusion has evolved over time, and despite initial uncertainty in most counties it has become accepted as an important guiding principle and as an expression of human rights. However, the practical application of this principle has encountered scepticism, challenges, and even some hostility; some have regarded it as impractical and unnecessary, others considered impairments as being a medical issue that requires medical interventions, and still more have seen them in social terms requiring changes in community attitudes and beliefs. Just what constitutes inclusion continues to be a source of some confusion and disagreement. In general, it now refers to all children, regardless of any form of impairment, having equity of learning opportunity. Disagreements remain, however, especially with regard to how equity of opportunity is best achieved. Does this mean all children should be educated in the same settings which must be open and adaptable to ensure the rights of all? Does it mean that within schools children should have access to a range of specialist provision or does it mean that we should think of inclusion as encompassing a range of specialist settings with a consensus of approach to equity? Recent literature, discussed below, suggests that inclusion has been accepted by many/most writers as a policy that takes account of competing interpretations while fulfilling the requirements for human rights and individual needs. Moreover, despite the differing views and models, it seems to be broadly acknowledged that inclusion entails more than the mere presence of SEN children in classrooms. However, there are mixed responses about the practicability of applying the policy to all students in all classroom scenarios, and the role of teachers in applying the policy is proving to be challenging. The concept of a 'continuum of provision' has emerged as an important practical response to the issue. As discussed below, it refers to inclusion being not just an either/or scenario in which children are either participating fully in all class activities or else excluded by being relegated to an external institution. Instead, there should be a range of options, a variety of specialist educational support services which can be used selectively according to the needs of the child.

Inclusion has been represented in various ways; for instance, Booth (2005) considered it to be concerned with increasing participation in curricula, cultures, and communities within local educational settings. Booth's understanding of inclusion is about evolving schooling systems so they can be responsive to diversity in a manner that values all staff and students equally. This view supports the development of comprehensive community preschools, schools, and post-school education. Moreover, it is a reflection of democracy; that is, the

struggle to achieve democratic, participatory education that contributes to continuous development of democratic norms and full participation by all within society.

Booth's (1981: 2005) view is all-encompassing and includes not just SEN children but also their families and staff. Booth's view of inclusion is greater than the notion that inclusion is mainly related to increasing the participation of children categorised as having special needs. The discrimination they face is not just related to their impairment. Thus, they can be treated solely on the basis that their participation is dependent on overcoming the disabling features of school. This undermines them as people as it ignores other facets of their identities. Additionally, labelling children as 'special' degrades a whole group and undermines the idea of diversity. Such a notion encourages educational difficulties to be perceived mainly in terms of imperfections of children and their deficiencies the focus of barriers to learning and participation. Following-on from Booth's (2005) work, the concept of inclusion must include issues of equity, participation, community, compassion, diversity, honesty, rights, joy and sustainability (Hodkinson & Vickerman, 2009). This can be a complex concept as people have different levels of tolerance of inequity in status, income, and living conditions (Booth, 2005).

The ideology of inclusive education is to meet the needs of all students (Al-Rossan, 2003), and central to all of this is the teachers - their beliefs, attitudes, and judgements play a key part in ensuring the success of inclusive practices in schools (Norwich, 1994: Brownell *et al*, 2010: Cassady, 2011). Attitudes, policies, and practices regarding the education of SEN children have advanced in recent decades, and many countries have introduced policies that nurture inclusivity. There have been many laws enacted in Western countries to require the inclusion of SEN students in public schools. The first US legislation in this sphere was *Public Law 94-142*, *Education for All* (1975); and in the UK the *Education Act* (1981). In Saudi Arabia, the inclusion movement originated with the concept of 'least restrictive environment' that was launched in 1990-1992.

Today there is considerable agreement on the concept of inclusion and all that it entails. It includes adequate planning and resourcing of suitable learning materials, but equally important, teaching staff need to fully understand the inclusion process and all that it entails in terms of curricula and teaching methods (Cassady, 2011). Also, there is a need to restructure school programs, timetables, and organisational arrangements as well as ensure that facilities are accessible and useable by all children (Hodkinson & Vickerman, 2009: Cambra & Silvestre, 2003).

Bayliss (2003, p1) argues for *"inclusion practice which supports a structure of interactions which is self-defining and self-regulating to build an inclusive community … it needs to reconcile the inherently contradictory nature (in the case of a school) of education and care"*. In the educational context inclusion usually entails processes of school modification and reorganization (Mittler, 2000, in Macconville, 2007), and to make changes it is necessary to understand the meaning and aims of inclusive education.

According to the Centre for Studies on Inclusive Education (CSIE, 2000: 1) the implementation of the inclusion agenda involves equality for all students and staff. Inclusive schools will have transformed their culture and polices to be more responsive to the needs of the students in the local area. Also, the barriers to learning must be eliminated, and this should entail working closely with parents and the local community. The teaching staff must perceive any difference between students as an opportunity to support learning rather than as a barrier in learning.

Peters (2007) explains that inclusive education is not confined to schools and applies to all levels. Inclusivity can have different objectives and cater to various classifications of SEN; additionally, it can have different contextual factors that may alter its implementation in different educational settings. There are also different levels of inclusive education directed to students with special needs: physical, terminological, administrative, social, curricular and psychological (Peters 2007). Avramidis and Norwich (2002) stated that the movement for inclusivity is not confined to education; instead it must be viewed as part of a 'broad human rights agenda'. Forest and Pearpoint (2009) posited that inclusion must be like living together and learning together; inclusion means 'being with'.

2.3.1 Continuum of Provisions for Special-Needs Children

There is not just one universally-accepted model of inclusion, and in most countries inclusion has not necessitated closing all 'special' schools and sending the children to mainstream classes nearby. Special schools have continued to function and in some settings the proportion of children attending them has even risen (UNESCO, 2009, Policy Guidelines: *European Agency for Development in Special Needs Education*, 2012). In some jurisdictions special schools have retained their former roles while in others the schools have been modified to function as 'resource schools' which work in tandem with other support institutions and with mainstream schools. Indeed, over time the notion of just two options (mainstream or special schools) has been replaced by a recognition that inclusion should entail what Norwich (2007)

describes as a "mixed model of provision"; that is, a system that consists of several services that cater for child diversity. In the UK, for instance, the Warnock Report (DES, 1978) did not require all children to be accommodated within mainstream schools: instead it was proposed (and adopted in the 1981 *Education Act*) that inclusion be conditional. That is, the child receives the type of educational service that he/she needs, that other children would not be disturbed or hindered, that parents are supportive, and that that the arrangements in schools involve the efficient use of resources.

This adoption of a mixed model of educational services has resulted in an adaptable range of options available to SEN children, and Norwich (2007) describes this range as a "continuum of provision" that accommodates child diversity. The continuum extends from full-time attendance in a special school (at one end of the spectrum) to full-time inclusion in a mainstream classroom (at the other end). But between those extremes is a flexible variety of educational provisions which can be adopted according to the needs of the child. For example; full-time attendance in a residential special school; full-time or part-time in a special unit within a mainstream school; full-time in mainstream class with some in-class support. Yet, while the notion of flexible options is sound in principle, a difficulty with the multi-faceted approach is that it has been challenging to define in policy and perplexing to apply in educational practice. These challenges are also evident insofar as many national governments and educational leaders have been unable to adequately clarify the extent to which SEN children are to be placed in local mainstream schools.

Moreover, a tension remains about what constitutes inclusion, although it seems to be accepted by many (though not all) that part-time placements in off-site settings (such as special schools or institutions) are compatible with principles of inclusive education so long as children are still considered members of mainstream schools and classes. In the UK this notion of 'separate-yet-included' has been voiced by Warnock (2005) who expanded the principle of inclusion to refer not to children all being under the one roof but rather to children all receiving a similar (or identical) learning experience, what she called a "common educational enterprise of learning, wherever they learn best".

Much of the focus on inclusion is on mainstream schools – how they modify their facilities, how they adjust the curriculum, and how teachers develop suitably inclusive methods. But another aspect to inclusion is the role of the special school. As noted, they have not all been closed; some continue to function as before, others have been changed so as to be

part of a new continuum of provision. Full comparative summary reports about inclusion are not available for Saudi Arabia and its neighbouring states in the Middle East, but consolidated figures are available for countries in the European Union. They show a range of national responses to policies of inclusion, some opting for the elimination of all/most special schools while other maintain all their special schools (UNESCO, 2009, Policy Guidelines: *European Agency for Development in Special Needs Education,* 2012). The UNESCO (2009) report acknowledges that countries interpret inclusion in different ways, and it notes that in some countries special schools continue to function as previously while in others the schools have been eliminated. Still others have been modified so that now they are regarded as support centres, while some have been amalgamated into mainstream schools as resource rooms staffed by teachers who specialise in working with SEN children. The Netherlands, for instance, has maintained its special schools but on the proviso that they are conducted as part of a spectrum of educational services for SEN children. The UK, on the other hand, has tended to relocate special schools to the campuses of mainstream schools so that they can better collaborate (Norwich, 2008). Another approach has been to redirect specialist staff to function as mainstream in-class support teachers.

The issue of placing SEN children within an educational continuum is just one aspect of inclusion – albeit a perplexing one. Other issues concern curricula and teachers. The curriculum is at the core of education and a main avenue for enacting the principles of inclusion (Ainscow & Miles, 2009: UNESCO, 2008). Inclusion entails not only integrating children into an existing mainstream classroom but developing a curriculum that can meet the needs of all. If learning is defined merely as the acquisition of information expounded by a teacher then schools will likely remain locked into rigid curricula and teaching practices. By way of contrast, inclusive curricula reflect the view that learning occurs when teachers cease to be formal instructors; instead they assume the role of facilitators who guide and enable students to be active learners who take the lead in making sense of their experiences. It has been evident in this research project that the roles of all teachers, mainstream and specialist, have been changing, and the quantitative and qualitative data discussed below show that some teachers have had considerable difficulty adjusting. So too, their responses to the survey questions demonstrates that a continuum of provision offers a range of educational options that still respects the integrity of the principle of inclusion.

2.4 Inclusive Education in Saudi Arabia:

Al Mousa (2010) explained that until recently there have been no historical or normative procedures for inclusion in the Arabian Gulf region. Mitchell (2008) also asserts that it is important to make a distinction between inclusive thinking and inclusive practices. The former refers to the established belief that society and all of its institutions will benefit from removing all non-essential barriers to participation of the disabled in the natural environment and in the community. Inclusive thinking emerges from a philosophical position that encourages creativity, flexibility, and resourcefulness in discovering and inventing opportunities for removing barriers and promoting full participation. In contrast, inclusive practice often refers to isolated examples of activities that allow the integration of disabled students to occur whether emerging from a segregated environment or full emersion in the environment of a regular school. Mitchell (2008) further elaborates that inclusion emphasises the provision of conditions that promote the independence and self-reliance of disabled individuals while discouraging practices that cause dependence and helplessness.

The concept of inclusion is fairly new in the Middle East where traditionally children and youths with disabilities were educated in special, segregated schools. However, in recent times most of the countries in the Arabian Gulf region have enacted legislation to support inclusion in all spheres of life (Gaad, 2011). However, those countries do not have any regulations or planning for realising the goal of inclusion; consequently, there is a need to create specific rules for factors such as class size, auxiliary services, teaching credentials, and compliance with inclusive practices. Inclusive education is a complex and challenging concept and in the Middle East, as elsewhere, the social, political, economic and cultural contexts play a central role in determining whether inclusion is implemented (Al Saloom, 1995: Gaad, 2011).

Saudi Arabia, like many developing countries, tries to obtain the most suitable educational methods for the benefit of all children. It is pertinent to note that in Saudi Arabia education of impaired individuals was originally carried out in mainstream schools, and it was only later that segregated ‘special’ schools were developed. Today, the Saudi education ministry is revising its paradigm of special education by returning all students to mainstream schools and by creating support systems - in particular, on-campus resource rooms staffed by specialist teachers (Al Mousa, 1999: Al Mousa, 2010). In Saudi Arabia, inclusive education is understood as the inclusion of students with minor and communicative disabilities in mainstream schools. The second category is of students who are physically impaired (e.g. blind

or deaf), and students with autism or multiple disabilities. The inclusion of impaired children is now an integral part of the national education system (IBE-UNESCO, 2007) though at present there is reportedly still a shortage of specialised staff to provide support in mainstream schools (Alguraini, 2012).

Saudi Arabia has long provided special educational institutes for children with visual and hearing impairments, but children with mild learning impairments have been educated in regular schools. In recent years there has been an increase in specialisation programs for SEN children, and these services have been expanding so that now only a few special schools operate on the segregation model. There has been support for the concept of inclusive education allowing SEN students to be educated in regular state schools along with their non-disabled peers (Alguraini 2012). There have been more children with learning difficulties that have been accommodated in their local schools, and the policy takes account of two categories of students for inclusion; the first group is already in regular schools in special education programs. These students include children with learning, cognitive, and physical disabilities, and also behavioural difficulties and dyslexia. The second group consists of children who have traditionally been taught in separate special institutes of self-contained classes, and it is these students who will benefit from inclusive classrooms and access to quality education in the least restrictive environment (Al-Mousa, 2010).

The Saudi government guarantees the rights of the impaired, and it instructs ordinary schools in the country to provide suitable accessible environments for their educational development. The Saudi leadership is committed to inclusive education and claims that educational curricula provide for the needs of all children (Al Mousa, 2010). The Saudi education system also offers boarding schools, resource rooms, and travelling teachers. The physical facilities in the mainstream schools are steadily being modified so as to cater for students with all types of impairments, though it is admitted that further improvements are required (UNESCO-IBE, 2007). The Saudi education system is yet to implement inclusive practices in full, but it is steadily moving towards adapting inclusion practices in all aspects of its education system (Al Mousa, 2010: Alguraini 2012).

Alquraini (2012) stated that prior to 1958 individuals with disabilities in Saudi Arabia did not receive any special educational service and the parents were responsible for providing all assistance. In 1962 the Ministry of Education established the Department for Special Learning and Rehabilitation for students with blindness, deafness and cognitive impairments.

By 1964 three institutes for blind students were setup in Mecca, Aneaza, and Alhofouf, then in 1972 the first institutes for students with deafness and students with cognitive and learning impairments were established. In 1984 one institute, in the city of Alhofouf, attempted to include students with mild disabilities alongside other students in its classes. This initiative was not successful because teachers were not adequately trained and because curricula and facilities were unsuitable, but nevertheless it as a milestone insofar as it began the practices of giving students the opportunity to attend regular schools. This initiative may not have had much success but it highlighted the point that inclusion is more than integration, and it led to the development of the policy of special education for students with disabilities in Saudi Arabia. In reviewing the Alhofouf model the Department of Special Education of King Saud University examined the American special education polices including the *Education for All Handicapped Children Act* (1976) and the *Individuals with Disabilities Education Act* (1990). The Saudi policy framework was then re-modelled on the US initiatives, and in 200٢ the Saudi government announced the 'Regulation of Special Education Programs and Institutes of Saudi Arabia' (RSEPI) that introduced the first education regulations for students with disabilities in Saudi Arabia (Alquraini, 2012: Ministry of Education, 2002).

This development stressed the importance of inclusion of students with disabilities and it specified that students with disabilities should receive education in the least restrictive environment. But despite this regulation inclusion has not yet been fully implemented for students with severe intellectual disabilities in Saudi Arabia, some students with severe intellectual disabilities are still being educated in special schools or private institutions. In 2008 the Ministry of Education in Saudi Arabia stated that 88 percent of the students with mild disabilities in the 2007/2008 academic year were educated in an inclusive setting, however most students with multiple and severe impairments, and those with moderate-to-severe cognitive impairments, were educated in specialist, segregated institutions (Alquraini, 2012).

The segregated 'special' institutes provide shelter, food, financial aid, and assistance to students with moderate or severe impairments, with cognitive deficiencies, with multiple disabilities, and with severe autism. An issue for students with such impairments is that these institutes revived individual education programmes (IEPs) which are based on the special education curriculum. These programs are specifically planned for students by the Ministry of Education, and they are usually different from the individualised programs developed from the general core curriculum. Moreover, the special educational institutes have often lacked related services such as occupational therapists, physical therapists, and speech/ language pathologists

who could provide support to students with impairments. Such services would allow students to benefit from their IEPs and develop communication, physical, and life skills that some public schools offer to students with mild disabilities (Alquraini, 2012).

In many countries students with severe intellectual disabilities are being educated in segregated settings even though those countries recognise their rights to be included like students with milder disabilities. But in respect to Saudi Arabia, there are many practical obstacles to inclusion, and that is the main reason such students are still educated in separate schools. However, another obstacle is the views and experiences of teachers regarding inclusivity (Brownell *et al*, 2010: Cassady, 2011). It is essential that teachers have positive attitudes to students with severe intellectual capabilities to ensure successful inclusive education. Conversely, negative attitudes by teachers lead to low achievement expectations which, in turn, limit acceptance of students with impairments (Alquraini, 2012).

Alquraini (2010) points out that since 2000 the special educational services in Saudi Arabia have made some major advances in offering high quality education to the special students within a least restrictive environment. Students with mild and moderate levels of impairment are now able to study in general education classrooms which are also provided with relevant support for special educational services. SEN students in inclusive schools follow a general education curriculum with a few alterations to suit the special education agenda. Thus, SEN children are able to interact with their typically-developing peers both in classes and in extracurricular activities in the school. However, the curriculum offered to special students is often modified from the general curriculum. In an inclusive setting, the SEN students spend most of their time with their non-impaired peers. The moderately-impaired students attend elementary schools from the age of six to age twelve, this being followed by middle school to the age of 18. At present, there is no opportunity for further education apart from some vocational training. The vocational training centres develop employment skills and independent-living skills for impaired individuals.

A problem with special education is that the segregated schools operate under the individual education programs, which are modified from a special curriculum designed by the Ministry of Education. However, the IEP may fail to meet the individual needs of the disabled students; moreover, the schools often lack the associated support services, such as speech and language pathologists, who could enhance the IEPs. Students with impairments in Saudi Arabia who are educated in segregated settings are usually unable to exercise their rights and

needs like regular students. Also, there is a perception that students with disabilities can jeopardise the education of mainstream students, though some Saudi experts believe that SEN students should receive the same level of education as their regular peers - but in segregated settings (Alquraini, 2010).

Professor Eman Gaad (2011), a prominent researcher on inclusive education in the Gulf, has stated that people in the region do not have favourable or accommodating attitudes towards individuals with special needs or impairments. Prior to the 1970s when oil revenue started to bring great wealth to the Gulf states, disabled children were perceived as an economic burden and a source of shame, families greeting them with anger and disappointment. In the West, a rights-based approach is encouraged towards people with disabilities and special needs, however, in the Gulf the tribal and familial bonds are more important than citizens' rights. Another major problem in the context of the disabled in Arab societies is the generally negative social attitudes towards those with an impairment. Often disabled children are isolated from society, and while in most families the mother is the primary caregiver she may lack the knowledge or ability to raise a disabled child. In recent years the responsibility for people with special needs has gradually shifted towards the state, and this is so in Saudi Arabia (Al Mousa, 2010). Indeed, the Ministry of Education has included an "Inclusion Project" as the sixth objective of its 10-year plan. At one end of the spectrum the plan aims to develop educational programs for gifted children, and at the other there is an emphasis on developing an inclusive education system that meets contemporary international expectations and attitudes. The inclusion project seeks to meet the needs of SEN children from partial to full inclusion in the classrooms (Weber, 2012).

The development of inclusion in Saudi Arabia is therefore currently based on the interpretation of inclusion as providing equity of opportunity through the education of all children in mainstream schools. This has yet to be fully realised as some children remain in special schools or institutions. These schools and institutions aim to provide worthy services, but in a number of instances they are outdated and their staff untrained and unfamiliar with the principles and practices of inclusion. An objective of the Ministry of Education is for the special institutions to be disbanded, however the Ministry has stopped short of declaring its intention of having a totally inclusive educational system. At present many mainstream schools contain resource rooms which provide specialist support for children with special needs, and individual schools claim to adhere to the principles and practices of inclusion. The current situation with regard to inclusion in Saudi Arabia informs the focus of this study and also the interpretation

of the term ‘inclusion’ which is used throughout the thesis. As explained above, the focus of this project is teachers’ perceptions and practices around inclusion in mainstream settings, and inclusion refers to the practice of providing equity of opportunity by meeting the needs of all children within a mainstream setting

2.5 Kingdom of Saudi Arabia:

2.5.1 Education in Saudi Arabia:

The foundations of the modern Saudi state were laid down in 1902 when Abd Al Aziz ibn Saud, a young Prince, launched a movement to unify the Arabian Peninsula, a process that led to the creation of Kingdom of Saudi Arabia in 1932. Prior to the formation of the modern Saudi state it was inhabited by small, independent, and hostile tribes.

The Kingdom is situated in south-west Asia and it comprises and area of 2.25 million square kilometres. To the north of the country lie Jordan, Iraq, and Kuwait. The eastern borders the states of Qatar, United Arab Emirates, and Oman, while Yemen lies in the south. Islam originates from the Arabian Peninsula and in the holy cities of Makkah and Madinah. Islam impacts the whole Saudi society as it governs the lifestyle of the Saudi people and serves as a guide for everyday life. The Saudi constitution and governance is guided by the Sharia Law which is based on the Quran and the Hadith (teachings of the Prophet Mohammad). Based on the 2004 census the population in Saudi Arabia is 26,417,599, of which 5,576,076 were expatriates.

Oil was discovered in 1938 and after the Second World War the large-scale production of oil had a major impact on enhancing the Saudi position in the world. Saudi has large oil reserves which makes it the largest exporter of hydrocarbons – and thus a notable player in the global economy. The revenue from oil has allowed the country to achieve major economic and social transformations in a very short time. Saudi Arabia has emerged as a modern and progressive state; the government provides its citizens with facilities such as health care, education, a good living standard, and free comprehensive education.

According to the United Nations, in 1952 there were only 302 elementary schools in the country and the literacy rate ranged between about 92-95 percent (Ferguson and Lopez,

2002). To address this dismal scenario the Ministry of Education was established in 1953; King Fahd was the first Minister who initiated the expansion and modernization of the education system. To implement changes the country was administratively divided into school districts under the governance of a superintendent and a technical staff to provide support. This Ministry also formed an Adult Education Department to address the problem of adult illiteracy. In the past four decades, there have been many initiatives to increase school standards and enrolment, and to improve educational facilitates and services. In 2010 there were over 29, 000 schools in the country and over 4,800,000 enrolments. Of these over 2, 400,000 were male while 2,410,000 were female (UNESCO, 2010/11).

The Saudi approach to education can be distinguished by several special traits; firstly Islamic concepts are incorporated into the school system and the curriculum. Secondly, male and female students are segregated; thirdly, the government provides complete financial support to all Saudi students; although most students attend government public schools a number attend private academies (Ferguson and Lopez, 2002). The Saudi education system is made up of three tiers; elementary, intermediate, and secondary (Ferguson and Lopez, 2002). The primary level has six grades and the students are admitted at the elementary class at the age of six. In 2010/11 there were over 13,600 public elementary schools in the country with almost 2,500,000 pupils (UNESCO 2010/2011). The ways in which schools are organised and managed are very similar to those of other developed nations; that is, the principal is appointed by the Ministry of Education, and an advisory council of local citizens and parents may work with the principal on some issues. Children attend school for about 6.5 hours daily. The curriculum includes Arabic, Islamic Studies, Arithmetic, Writing, Reading, Cultural Studies, Art, and Physical Activities. Lessons on these subjects are of about 45-50 minutes duration. Children may be required to complete homework, and there is close liaison between teachers and parents. A typical suburban school in Riyadh may contain about 400 girls, classes consisting of an average of 25 students. Most schools have a resource room for children with special educational needs, the room being staffed by trained specialists. [See description of resource rooms in the Appendix, p 27٣].

After completion of the elementary schooling the students move to the secondary level. The intermediate (or middle school) is for students aged 12-15 and consists of three years of tuition; in 2010/2011, there were 7,900 public intermediate schools with 1,190,000 students. The secondary (or high) schools are of three years duration for students aged 15-18. In

2010/2011 the country had 4,900 secondary schools containing approximately 1,100,000 students (UNESCO 2010/2011).

The 2010 report by the Arab Bureau of Education in the Gulf States (ABEGS, 2010: UNESCO – IBE 2010) stated that at that time about 5,600 children were attending segregated special schools while about 50,100 were enrolled in special programs at regular schools. However, it did not explain what the 'special programs' might comprise, and neither did it clarify the types of impairments deemed acceptable (or unacceptable) for attendance at the mainstream schools.

2.5.2 Special Education in the Kingdom:

During the 1950s, when the modern education system first evolved, blind students and students with mild hearing loss joined other impaired peers to attend regular neighbourhood schools, but it was in 1962 that the Ministry of Education started the Department of Special Education to oversee the development of special education programs. Then in 1972 the Ministry formed a new department, the Department of Special Education (responsible to a General Directorate) which consisted of three divisions: The Educational Administration for the Blind; the Educational Administration for the Deaf; and the Educational Administration for the Intellectually Impaired (Al-Saloom, 1995).

The intention of the General Directorate was to administer and expand special education services in the major Saudi Cites. In 1978 there were 27 special schools, this number increasing to 47 by 1992. Ten of these schools were for the blind, 23 for the deaf, and 14 for those with an intellectual impairment. These schools had about 6,000 male and female students, at the same time special education teachers working in these schools rose in number from 23 in 1962 to 1,346 in 1992 (Al-Abduljabber, 1994). The curriculum was the same as regular schools, but the vocational curricula included training for handcrafts, gardening, sewing, woodworking, and typing. The special schools for intellectually impaired children accepted children aged 6-14, the children being provided with basic academic and vocational training, with a focus on life-skills and rehabilitation.

Al-Kheraigi (1989) critically evaluated approaches to the education of SEN children in Saudi Arabia, identifying four main problems. At that time, she noted the large number of

impaired children who were not enrolled in any special educational program; the insufficient number of teachers for special education; the inadequate training for specialist teachers; and a curriculum that was outdated and which made few provisions for SEN students. To address these issues the Ministry subsequently sent trainee teachers to Western nations (mainly to the US and UK) so they could gain expertise in the field of special education (Al- Mousa, 1999). A watershed event for the development of special education in Saudi Arabia was in 1985 when the College of Education at the King Saud University established a Special Education Department to provide special-education training via a four-year undergraduate program. This new department introduced many significant changes, the foremost being the training of Saudi teachers so they could understand the special needs of the Saudi children and their families, and who could also work usefully with expatriate teachers from diverse backgrounds. The Western-educated professionals who joined this department were able to introduce new concepts and practices for special education, and in following years the number of Saudi applicants steadily rose. This new department became a centre for debates and research on aspects of special education, and equally important, it advocated for reform of the school system and for the treatment of SEN children.

2.5.3 Reforming the Saudi Special Education System:

Since its commencement the special education system in Saudi Arabia has developed separately from the general educational service, and the Special Education Department at the King Saud University has promoted the incorporation of international standards and approaches. The inclusive education movement in the US has had a global impact, and it has influenced the course of educational reform in Saudi Arabia too.

In 1995 the Saudi General Secretariat of Special Education *(*GSSE*)* announced key reforms which were led by a blind professor, Nasser Al-Mousa. It was Al-Mousa who encouraged the adoption of the new philosophy of normalising regular schools for special education. Also, the GSSE recognized that many children in special education had multiple disabilities such as speech and language impairments, and some also had emotional and behavioural disorders that are not usually detected in Saudi schools. These disabilities must be recognized so special education services can be provided (Al-Mousa, 1999).

To resolve the problem of segregation of special education the GSSE adopted the Cascade model by Deno (1970) which recommends a range of educational alternatives ranging from full segregation to partial-inclusion, and to full inclusion. The latter model consists of full

incorporation of children with special learning needs in regular schools, but the school must be able to provide the relevant support for both the children and the teachers. Given the traditional separation between special and general education these reforms were gradual, focusing on a continuum of special educational services. The prime goal of mainstreaming includes the provision of special educational support in regular classrooms whenever possible. To accomplish this goal the GSSE has independent classes in regular schools, resources rooms, consultants, and travelling teachers.

To a large extent the reforms in Saudi Arabia have been successful in including many impaired students in regular schools. The success is evident in the growth of special education in Saudi Arabia. In 1995-96 there were 48 special schools with 4,828 students with only 12 self-contained classrooms in regular classrooms for 380 students. After the GSSE reforms the special education provision in regular schools increased from 390 in the year 2000 to 1,073 in 2003. Likewise, the number of students in special education rose from 5,208 in 1995-96 to 20,000 in 2002. Prior to 1995 all disabled students were educated in segregated special schools, but the situation has transformed and now about 80 percent of the disabled students are attending regular school (Al-Mousa, 1999).

2.5.4 Defining Disability and Special Education in Saudi Arabia:

The Saudi Ministry of Education defines inclusion as educating SEN students in regular schools (Document of Rules and Regulations for Special Education Institutes and Programs, 2002). Nasser Al Mousa, working at the King Saud University, played a vital role in the development of special education and the policy of inclusion; he explained that "*regular schools are considered the natural environment for both children with special needs and regular children to grow together....the inclusive environment contributes to the increase in social acceptance of students with special needs by their regular peers … regular children can now replace their limited perceptions about special needs people*" (Gaad, 2011. Ch 1)

The regulations in Saudi Arabia require schools to allow students with moderate and severe intellectual disabilities to receive education with their normally-developing peers in regular classrooms to the fullest extent of their abilities. However, despite these regulations this has not been fully implemented, and children with severe intellectual disabilities are still educated separately in special school or private institutions (Alquraini, 2012).

2.6 Disabilities:

The tasks or determining who is impaired and the degree of impairment have always been challenging, and there are no universally-agreed measures (Lerner, 2000: Hodkinson & Vickerman, 2009). In Saudi Arabia an impairment, or disability, is defined as either a partial or a complete inability to function physically, intellectually, communicatively, educationally or psychologically. In general terms, an impaired person is one who is incapable of functioning normally, and it often is used to describe those who are impaired by blindness, deafness, intellectual limitations, physical disabilities, and individuals with specific learning difficulties. This also includes individuals who are autistic or otherwise emotionally distressed (General Directorate of Special Education, 2012).

Al-Gain and Al-Abdulwahab (2002) pointed out that traditionally disability studies in Saudi Arabia focused on rehabilitation because the medical concept of disabilities viewed disabled people as ill and in need of medical attention. In Saudi Arabia, it is known that a proportion of the population suffers from functional disabilities because consanguineous marriages are common, a practice that enhances the risk of inherited genetic abnormalities. The Saudi cultural perception of disabilities is that they are a cause of personal and family disgrace, and they are characterised by helplessness, dependence, home confinement, and a poor quality of life. This is one reason there has been limited development in the realm of special education (Al Mousa, 2010).

2.7 Special Education:

Special education is a generalised descriptive term for the modified form of schooling provided for people with physical and cognitive impairments. Special education should take account of many aspects of the needs of individuals including the nature and severity of their impairment, their family and social circumstances, their psychological (mental-health) status, their health, and the specific educational requirements (Umm Al-Qura University, 2012).

2.8 Special Needs:

The Saudi definition of ‘special needs’ considers the differences between the needs of the disabled and their normal peers. The differentiation is studied in the context of intellectual, sensory, and communicative factors as well as their behaviour and emotional condition. Such differences lead to the development of special educational programs to meet the particular learning needs of each SEN child (General Directorate of Special Education, 2012).

2.9 Students with Special Educational Needs:

In general terms, students with special educational needs are those with impairments that inhibit their ability to learn in the same way or at the same rate as non-impaired children; consequently, the children require special individualised attention. SEN students often need specially-adapted educational programs, services, methods, equipment, and instruments that are suited for their needs (General Directorate of Special Education, 2012).

2.10 Brief History of Specific Learning Difficulties:

In 1996 'Specific Learning Difficulty' (SPLD) was presented as a formal classification of disability in the Saudi education system. The notion of SPLD in Saudi Arabia had gained acceptance in 1992 with the establishment of the Special Education Department at King Saud University. Saudi educators have adopted the United States model of SPLD. The Arabic translation for the term "*specific learning difficulty*" is '*ubat al taall' um*' which in English would mean learning difficulties (Bazna, 2003). The main concept in both languages is the same, and the Ministry of Education *Regulation of Special Education Institutions and Programs* (2002) provides a manual that informs about the classification of disabilities, the required procedures for decision-making, and the measures for defining special education services.

2.11 Defining Specific Learning Disabilities:

Specific learning disabilities are often considered to be represented on a spectrum, with various strands and many elements relating to physical and cognitive dimensions and genetic factors. The most recent version of the Diagnostic and Statistical Manual (DSM-5) of the American Psychiatric Association broadly describes learning disabilities as comprising a variety of impairments which may affect the acquisition, retention, and understanding of verbal or nonverbal information (DSM-5, 2013). These impairments affect, to a greater or lesser degree, the ability of individuals who might otherwise exhibit average capacity to think and reason, to learn and remember. It should be noted, however, that many/most learning disabilities are different from global intellectual deficiency.

Learning disabilities usually result from impairments which affect the capability to identify, think, and remember information, and these, in turn, can impede such key functions as language processing, visual and spatial processing, attention, and memory (Hudson, 2015). Similarly, they can reduce the individual's ability to conduct routine daily activities. Learning disabilities

vary in severity and they are most commonly evident in the ways they impede the individual's skills in reading, writing, speaking and understanding spoken language, and arithmetic.

Snowing (2005) points out that SPLDs are commonly described as unexpected problems that children experience in the context of education. 'Learning disability' in the USA describes learning problems that occur in the context of delays in cognitive development signalled by low intellectual development. The SPLD must be viewed as a statistical definition that must be taken as a starting point for more detailed assessment of the child's strengths and difficulties. There are many specific learning difficulties and include dyslexia, dysgraphia (which are reading and spelling difficulties), arithmetic problems (dyscalculia) and problems with motor coordination (Dyspraxia) (Hudson, 2015).

Anastasiou and Polychronopoulou (2009) stated that at the international level the SPLD field is undergoing a turbulent period, this being characterised by the mixed accounts of identification of SPLD in the international scientific discourse. In the US, a Federal Law (IDEA, 2004) introduced drastic changes that have affected the US procedures for the identification of students with SPLD. The main factor that initiated such change was the problem of over-identification.

The US law-makers are calling for a shift in the identification of SPLD, arguing that the IQ achievement discrepancy approach must be replaced by a more innovative approach known as the response to intervention (RTI). The severe discrepancy between intellectual ability (using an IQ test) and academic achievement determines which students are considered to have SPLD. This approach has resulted in high costs for educational authorities and hindered the education intervention for SPLD children. Kavale (2005) argued that problems in identifying SPLD resulted from the lack of agreement on how to put to use a formal definition of SPLD. The definition of SPLD remains contentious primarily because of its failure to disclose the two critical elements which include an understanding of what constitutes a learning difficulty and a rational exposition of the reason a particular student has a learning difficulty. The present definitions of SPLD are too broad, and one purpose of the responsiveness to intervention is to redefine SPLD. The *Individuals with Disabilities Education Act* (IDEA, 2003) did not include any modifications of the SPLD, thus there is no new definition of SPLD; the RTI is a new working definition that will make the discrepancy criteria redundant as the working definition of SPLD.

Regarding the responsiveness to intervention, Fuchs and Mock (2003) argued that it is an alternative method of identifying leading disabilities. The RTI is being favoured by many institutes because the RTI requires that teachers use an effective instruction method and evaluate their students' performance (Flanagan & Alfonso, 2010: Gresham *et al*, 2010). The responsive students get more instructions from their teachers, while the non-responsive students can be referred for a special educational evaluation. The SPLD identification system can distinguish the truly disabled children from children who seem to be disabled, and this can lead to a reduction in the load of special educational services.

Kavale and Spaulding (2008) argued that problems with identifying learning difficulties have led to the convergence of researchers, professional organisations, advocacy groups, and other stakeholders to create an agreement on the identification and implementation of an ad hoc method for SPLD identification. According to the IDEA (2004), in the US the local authorities do not have to consider the discrepancy between achievement and intellectual disability in children in order to identify SPLD. Rather, this is the RTI that is based on the systematic application of scientific-based intervention (Flanagan & Alfonso, 2010).

According to IDEA (2004), SPLD is primarily a disorder in the psychological process for understanding language - both spoken and written (Kavale *et al*, 2009). The disorder can be visible in a flawed ability to listen, think, speak, spell, or do mathematical calculations. This definition provides explanations for disorders such as perceptual disabilities, brain injury, minimal brand dysfunction, dyslexia and mental aphasia. This definition does not consist of problems such as visual, hearing, or motor disabilities of intellectual retardation of emotional disturbances, however, the definition should reflect the current and comprehensive understanding of the SPLD construct.

The identification of children with SPLD, and how they can be differentiated from students with low intellectual disability and low achievement dimensions, has been problematic (Gresham & Vellutino, 2010: Flanagan & Alfonso, 2010). There has been a lot of argument in the field of special education on these issues, and studies have shown that inequality can results from the use of IQ as an indicator to detect SPLD. A basic assumption in identifying SPLD is the existence of a severe discrepancy between the intellectual ability and academic criteria.

2.12 Dyslexia:

Dyslexia is perhaps one of the mildest representations of SPLD, and it refers to difficulties in reading, spelling, identifying words, and comprehension (Demonet *et al*., 2004).

As with most SPLDs, it forms a spectrum, MacFarlane *et al* (2010) explaining that it is difficult to diagnose accurately since it is identified through exclusionary criteria. That is, it is diagnosed in individuals who have severe difficulties in learning to read and spell without any obvious verbal or nonverbal impairment. This disorder is not fixed; it changes with people and circumstances, and it can affect the performance of a person in tasks such as searching for information (Shaywitz & Shaywitz, 2005). In terms of cognition, it can lead to deficits in phonological processing and to reduced working memory capacity or written material. Csizer *et al* (2010) stated that dyslexia are the most common type of SPLD as it represents an underlying concept that cannot be observed directly and it is dimensional, meaning it can range from mild to severe.

Ramus (2003) stated that 'developmental dyslexia' is an inability to acquire reading skills, and this affects about five percent of children regardless of intelligence, education, and social background. Many researchers agree that dyslexia is a neurological disorder that is genetic in nature, but after decades of research academics still disagree over the neurological and cognitive basis of the condition.

2.13 Issues in the Field of Specific Learning Difficulties:

There has been an increasing interest in understanding SPLD in recent decades (Kirby *et al*., 2005), and this has led to an increasing labelling of such conditions. The new categories include dyscalculia, deficits in attention, motor control and perception; (DAMP). As the awareness in these classifications has increased the providers of education and health have come under pressure to provide more services, yet it is unclear whether labelling children with disabilities will benefit them (Ho, 2004), or whether there is any benefit in creating separate categories for children based on their disability.

Riddick (2000) looks at the arguments against labelling and states that it undermines the individuality of each child who is prescribed in a particular label. Moreover, labelling can lead to stigma and to the unfair categorisation of children (Ho, 2004). In Britain, the Warnock Report abolished statutory categories such as physically handicapped, and maladjusted; instead it introduced a continuum of special education (*Warnock Report*, 1978). The concept of SEN has been useful in enhancing awareness, but perhaps now it should be replaced with a more precise formulation.

It is evident that SEN lacks clarity in understanding some children's educational needs. Theoretically, special educational needs imply that the particular needs of each child can be readily identified. Furthermore, the idea that each SEN child could be identified without any reference to knowledge around an existing label or category was based on the assumption that experienced professionals will be able to investigate and perceive the needs of each child (McLaughlin *et al*, 2006). Labelling is seen as an unnecessary and restrictive process, and the abolition of this practice will help eliminate stigmatisation and discrimination – but the specific requirements of each child must still be identified and described (*Warnock Report*, 1978). The social model of disability does not preclude medical considerations where they are related to an individual's experience of stability but others have argued that the social model is sufficient for explaining people's experiences with disability. However, there is a need for interactionist analysis that allows for individual variation in physical impairments and differences so that can be considered in the context of social, economic, environmental, and political terms (Riddick, 2000).

It has been suggested that the terms 'classification' and 'labelling' are inevitably used together (Thomson, 2012), and it is argued that identification and classification of students with special needs leads to the confining of these students to a category of disability. These categories are constructed artificially for instructional purposes as individuals cannot be precisely categorised; furthermore, a student may have special needs for one or more categories. The classification of children and youths with disabilities has been complex and fraught with controversies (McLaughlin *et al*., 2006). The classification is especially problematic when applied for the purpose of determining eligibility for additional specialised educational services. The process of testing and classifying possible candidates can take place in clinical settings, but in a school system it can be a chaotic process influenced by many individuals and conducted in an environment where resources are limited. Despite the controversies and problems, the aim of classification of students has been to provide additional educational services and interventions to meet the individual needs of the children. However, in an environment where resources are limited an educational system with inherent inflexibility may not meet all the needs of each child.

It is a predicament for educators and parents to select the most appropriate intervention (Macintyre & Doponia 2003). Some schools have motor programs for children with development/coordination disorder, other offerings include social-skills programs for children with Asperger's Syndrome, and also there are support schemes for children with dyslexia.

Some studies have questioned whether professionals dealing with SPLD have the right training and knowledge to meet their needs, and studies show that professionals may be aware of SPLD but may lack relevant knowledge (Macintyre & Doponia 2003).

2.14.1 Attitudes of SEN teachers and students in Western countries:

Sharma *et al* (2008) explain that in most western countries, such as the USA, UK, Canada, and Australia, there has been a move to include impaired students in normal schools, and as noted, these countries have enacted specific legislation to promote inclusive practices. This legislation has influenced policy-making in developing countries too. Countries such as India, the Philippines, and Hong Kong have also focused on policy making instead of legislation to encourage inclusive education. However, the use of legislation alone cannot ensure that the concepts of inclusive education are implemented, and writers such as Avramidis and Norwich (2002), and Forlin (2001), have stated that the successful implementation of inclusion reforms are largely dependent on the educator's attitudes and co-operation. A positive attitude to disabled students by teachers can influence other teachers to view such students in a positive light. To prepare educators for inclusive classrooms it is important that they can comfortably interact with disabled students (Cassady, 2011). Also, teachers must fully embrace the philosophy of inclusive education thus the preparation programs for teachers must incorporate all facets of inclusive practices.

In the UK, Golder *et al* (2009) stated that in 2006-2007 the Training and Development Agency (TDA) set up a development program to allow Initial Teacher Training and Education (ITTE) placements in specialist courses. The ITTE has highlighted the skills and a positive attitude required for special education, the purpose being to ensure that teachers can accommodate a child with specific learning difficulties if the teachers have the appropriate knowledge. The Teacher Training Agency and the higher education institutes now ensure that the initial teacher training and the programs for constant professional development can provide

a basis for developing core skills and knowledge of SEN. However, a problem in this training process is that teachers lack any direct contact people with impairments and may not have any prior experience of teaching SEN students. As noted, the legislative and policy making in England now have more emphasis on inclusive education and this entails the training of teachers who are then prepared for a diversified learning environment.

In the past three decades, there have been major developments, and inclusive education in England has increased the challenges for teachers. Since the publication of the Warnock Report in 1978 there has been on-going debate about integrating pupils with special needs, and the more recent Rose Report (2009), emphasised the needs of pupils with dyslexia, a move which has increased the level of expectations of mainstream teachers. The Initial Teacher Training and Education has faced problems staying abreast of these developments, despite the government recommendations to include the main aspects of SEN in teacher training programs. Furthermore, it has proved challenging to develop teaching skills relevant to all the likely needs of the children with special requirements. In England, the government has endeavoured to respond to changes in societal values, attitudes, and practices to augment these initiatives in the sphere of SEN. The recent policies, legislation, and related initiatives use the theories of integration and inclusion interchangeably, they mix (and confuse) terms such as 'special educational needs', 'specific learning difficulties', and 'disabilities' - and this shows the intricacies involved in debating, defining, and fostering an understanding of inclusive education. At the same time, the concept of inclusion has been debated with different themes, presented by groups of people with disability, parents, education professionals and academics (Richard, 2010).

Sosu *et al* (2010) stated that in the UK educational inclusion and social justice are important concerns in policy formulation. To implement the inclusion agenda, it is essential that teachers' beliefs about inclusion are positive because those attitudes can have a positive impact on the children's classroom learning. To implement educational inclusion, it is important that the schools cater for all children regardless of their disability or their social, emotional, cultural or linguistics differences, but this usually entails reorganization of mainstream schools so that each school can enrol children who may have a wide variety of impairments. The inclusion debate emphasises how teachers can address individual differences in their students and how they can use their specialist knowledge for each type of student (Cassady, 2011). This also emphasises inclusive practices whereby teachers adapt mainstream academic approaches to assist SEN students so they can access the curriculum.

In 2004 the launch of the UK government's strategy for 'Removing Barriers to Achievement' gave new impetus to the SEN issue. This initiative explained that all teachers in the UK should expect to have SEN children in their classrooms. All schools were directed to transform so that SEN students could adapt to their learning environment instead of just fitting them into the existing organisation of the school. But despite these changes there have been conflicts with the implementation of inclusive practices. The TDA, with the ITE providers, seeks to remove barriers to achievement and to support trainee-teachers' learning about inclusive teaching, behaviour management, assessment methods, and social-support access. The new Standards for Qualified Teacher Status, and the induction processes for new teachers, emphasise the importance of new teachers being prepared to teach children who exhibit various types of needs. In 2008 the ITE tutors were given SEN information or a 'Disability Training Toolkit' for primary teaching program, this being followed in 2009 by a new information 'kit' relevant to secondary teaching (Richard, 2010).

Veen *et al* (2010) stated that educators in Europe have been increasingly focusing their attention on inclusion of students with special educational needs in conventional schools. The problem is that the students with educational needs do not form a clearly defined group. Moreover, the funding policies for children with special needs vary from country to country, and that is why the percentage of students considered to have special educational needs also varies in different countries. In the Netherlands, there are several hurdles that are thwarting the provision of adequate education of SEN students in mainstream primary schools (Veen *et al*., 2010). Firstly, it is not clear how many students are considered to have special needs. Then there are other contextual factors such as teachers' attitudes to inclusion. Research has shown that cognitive problems had a stronger impact on the schooling of special needs children than social, emotional, and physical problems. Thus, the attitude of the teachers towards inclusion impacts on how many children end up in special education.

Ernst and Rogers (2009) stated that the teachers' attitudes to inclusion is an important component of inclusion, but whether they accept inclusion determines their commitment to ensure that the inclusion agenda is properly implemented. Studies show that teachers who have less positive attitudes towards inclusion are less likely to deploy effective instructional techniques as compared to teachers with more positive attitudes (Ernst and Rogers (2009).

Since the teachers work in a demanding environment it is possible that they dedicate less to SEN students than students who need few instructions and less time.

McHatton and Parker (2013) reiterate that according to research the success of inclusion is mainly dependant on teachers' attitudes. Recent reviews show that majority of teachers were uncertain or had negative perceptions about inclusion because of their lack of knowledge, competence, and confidence. Some teachers feel challenged and frustrated given the burden, fear, lack of support, and inadequacies about their ability to teach children. Another factor can be the teachers' self-efficacy – that is, their self-belief about being capable of working in inclusive classes. Research suggests that teachers' belief regarding their ability to work with students with disabilities predicts their attitudes and willingness to work in an inclusive environment; a stronger sense of efficacy indicates more positive attitudes. The classroom teacher with efficacy may be more open to including students with certain types of disabilities. Also, as noted above, teachers' support for the placement of students in general education settings varies with the nature of the disability. A majority of teachers support the inclusion of students with mild learning disabilities, mild physical disabilities, and sensory and medical disabilities in general education classrooms (Brownell *et al*, 2010: Cassady, 2011). But teachers have serious concerns about the inclusion of students with emotional and behavioural disorders. The practical considerations determining teachers' attitudes include factors such as logistics, class load, and training. These factors may play an influential role in the teachers' attitudes rather than their belief about inclusion.

Heiman (2004) suggested several different models of inclusion; 'in and out two teachers', full inclusion, and rejection of inclusion. Most of the teachers in the UK regard the 'in and out' model as suitable. The teachers who favour this model stated that students with disabilities would benefit from the special instruction combined with regular lessons. Also, the interaction with their peers in regular settings would be beneficial. In the two-teacher model two teachers teach together in the classroom where one teacher has special education training and concentrates on the disabled students. The full inclusion model can be possible with additional support and cooperation between teachers and the educational.

2.14.2 Attitudes to SEN in Arab Countries:

Crabtree and Williams (2011) explain that in Arab societies the impetus to adapt the inclusive education for children with special needs has been due primarily to the international movements described above. Despite support for inclusivity, it has not been well received in certain countries that are struggling to educate all regular students. However, Saudi Arabia offers specialised training to neighbouring Arab states to remove barriers and create enabling environments (Alghazo & Gaad, 2004: Alghazo, 2005). Bahrain, too, has a well-advanced inclusion strategy. Arab countries generally are now engaging with the inclusive education agenda but at present some are unable to provide suitable resources for the teachers and schools. In countries like Kuwait and the UAE the teachers have negative attitudes towards inclusive education because of the cultural and traditional uncertainty regarding the disabled, and this is a major concern. Weber (2012) points out that in the Gulf countries (Qatar, Saudi Arabia, UAE, Kuwait, Bahrain, and Oman) inclusive education is perceived in different ways by policy makers and educators. Inclusive education is referred to as 'education for all' but it also refers to situations whereby specialised 'resource' rooms, staffed by specialist teachers, are provided so that they can provided extra complementary assistance to disabled students who usually attend mainstreams classes.

Alghazo (2005) notes that in the Gulf States there are an increasing number of students with disabilities being taught in regular classroom or in a regular school environment. In the past five years, there has been a lot of progress in the education of SEN children in the United Arab Emirates; the United Arab Emirates University (UAEU) has restructured its programs the aim being to integrate the NCATE and CEC standards in all programs to ensure teachers can qualify and develop the skills to educate disabled students.

A regional Gulf study by Alghazo (2005) assessed teachers' beliefs of their performance, and this is an important step in planning the reform of the education system. That study sought to modify the training programs in the UAE by researching the special education teachers' perceptions of effective instructional practices for disabled students. It showed that the teachers did not recognise themselves to be effective instructors because SEN students in

the UAE are not considered for a formal assessment since there is a lack of assessment sets designed for such students. This is why the students in special education are sometimes misdirected. Another factor is culture that influences the placement of students. In the UAE, many parents are unwilling to label their children as disabled and are demanding mainstream education for them in regular classrooms coupled with support from special education institutes.

Alghazo (2005) argues that another issue in the UAE is the curriculum which remains the same for all students regardless of impairment. The supervisors expect the teachers to finish the curriculum for all students regardless of their abilities. However, these demands constrain the teacher's ability to accommodate the curriculum based on individual needs, and hence they may be unable to use any modified or suitable instructional practices in the classrooms.

Gaad and Khan (2007) stated that the main challenge facing the primary mainstream teachers in Dubai was to adapt the inclusion agenda. In Dubai, the Ministry of Education has issued licenses to private schools for expatriates to follow the syllabus of their homeland. The Ministry of Education requires all private schools in Dubai to provide extra support for SEN students if they are admitted. The Ministry is also responsible for creating awareness of SEN and creating intervention programs for students with special needs. Also, in Dubai most students did not support the inclusion of SEN children in mainstream education without teacher-training and additional resources. Mainstream teachers were concerned about the availability of support resources and the right instructional material required for students with SEN. The teachers also felt that they did not have any time to consult with experienced teachers and that their loads in mainstream classrooms made it difficult to meet the needs of the SEN students.

Alghazo and Gaad (2004) reported that in some Gulf countries attitudes to disabled students and their inclusion in regular education was very negative amongst the teachers. Many educators in the UAE still expressed the belief that students with disabilities must be segregated, and their study confirmed this. There have been other views which posited that only students with specific minor learning difficulties should be integrated in the regular education classrooms and that students with more severe disabilities such as intellectual impairments, and behavioural problems should be excluded.

Describing the situation in Egypt, Eman and Mohamed (2011) stated that inclusivity gained a boost by the *Child Act* in 2008 and the issuance of *Inclusive Mandates* in 2009 and 2011. In the Egyptian context, the teachers' attitudes towards inclusive education is based on their self-efficacy in managing pupils with SEN. The study in Egypt showed that the inclusion

of students with SEN could predict the preschool and primary school teachers' levels of self-efficacy. As previous studies showed, teachers who were experienced and confident had more-positive attitudes towards inclusive education than teachers with less experience. Their work also revealed that Egyptian colleges of education did not at that time have any special programs for preparing teachers to teach students with SEN.

Working in Jordan, Al- Zyousi (2006) stated that Section 4 of the Jordanian *Law for the Welfare Disabled* states that the people with a disability must be provided with an appropriate education that corresponds to their level of impairment. In Jordan, SEN students are defined according to movement problems, visual impairments, hearing problems, and intellectual disabilities. Teachers' attitudes towards inclusion varies in the different levels of the educational sector, but inclusive practices have not been fully implemented in Jordan and teachers do not have much experience with SEN students. In Jordan, many teachers and participants are willing to include students with certain types of disabilities in regular schools, however the inclusion of students with severe mental impairments that influence their reading, writing, arithmetic and behaviour are not favoured for inclusive classrooms (Al-Zyousi, 2006). In Jordan, like several other Arab countries, there is a need for better qualification and training.

2.15 Methodologies used to survey teachers' attitudes and experiences:

The methodology applied in this work is detailed in the following chapter, however at this point it is relevant to briefly note some of the approaches used in previous studies. Many enquiries have been conducted into the attitudes and performance of teachers; it is not possible to review them all except to record that the mixed-method technique has been confirmed as a valid and reliable research procedure on a subject such as discussed here. The most commonly applied survey methods consist of questionnaires (which can take various forms – paper, telephone, on-line), group discussions, individual interviews, observations, and feed-back surveys. According to the purpose of the study these can provide both statistical (quantitative) data and qualitative information in the form of descriptions, comments, and observations. Moreover, the development over time of increasingly sophisticated software has enabled researchers to identify themes and issues from a large and disparate body of data.

Eman and Mohamed (2011) studied inclusive education in Egypt, their focus being on teachers' self-efficacy and teachers' attitudes to inclusion. Working in 95 primary schools, they used a 25-item survey to assess teachers' attitudes to the benefits and disadvantages of inclusion, to segregation, and to classroom management. This was supplemented by a teacher

self-efficacy scale using 12 questions on aspects of classroom management and efficacy for student engagement. These questions used a Likert type scale, analysis being by the SPSS software (Statistical Package for the Social Sciences).

A slightly different approach was adopted by Gaad and Khan (2007) who examined the challenges of inclusive education in the UAE and the perceptions of teachers regarding SEN students attending mainstream classes. Their study was designed to identify whether teachers felt capable of adopting the skills required for inclusive education. The questionnaire was in two parts; the first to find out whether participants perceived themselves capable of adapting to the exceptional needs of the classroom; the second to explore whether teachers had the required knowledge to work in an inclusive classroom. The questionnaire approach was used because it was easy to administer and to get feedback from teachers, however the researchers found it was difficult to create simple questions. Also, the researchers found it difficult to analyse the results from the questionnaires because the questions were too long and complicated. This study also used semi-structured interviews for the research participants and the research community.

Alghazo (2005) conducted a study in the UAE to examine the perceptions of special education teachers and the effectiveness of their instruction practices. The study used two surveys; the first was demographic and the second contained questions about instructional and management practices regarding planning, managing, delivering, and evaluating instruction for SEN children. The researcher ensured the validity and reliability of the questionnaire, the data later being analysed statistically. The researcher used means and standard deviations to appraise the teachers' perceptions of effective instruction for students with SEN.

In their study in the UAE Alghazo and Gaad (2004) also used mixed methods, combining quantitative and qualitative approaches. 250 teachers in Abu Dhabi completed questionnaires, this being followed by interviews to explore their attitudes towards inclusion. The questionnaire was derived from the literature using a data-gathering instrument, and the Likert scale was used to obtain responses. Apart from the questionnaire, the researcher used structured individual interviews which created the qualitative data for the study.

A large-scale project was conducted by Crabtree and Williams (2011) who studied the implementation of inclusive education in Arab societies and the development of inclusive methods. Their work consisted of an in-depth exploration of the ethical and geopolitical dimensions behind inclusive research in the region. This was rather different from those cited

above because it used a quantitative online survey which contained both open-ended and closed-ended questions, and was sent to 48 agencies that offered educational services to children with disabilities. It entailed little direct or personal contact with respondents, the data being analysed by various statistical software programs.

Other research investigations used mixed methods to survey the experiences of trainee teachers and new teachers. For example, Richard (2010) conducted a study of student teachers who were sent on a four-week placement with SEN students. These placements consisted of two weeks at a mainstream school and two weeks in a special school, giving the students the opportunity to compare the practices in the two schools. The researcher conducted two sets of interviews with the students; the first followed the placements and asked students to reflect on their experiences. The second interviews were conducted after the final assessed teacher practices where the students were asked to identify the elements they had taken from specialised placements and used in their final teaching practices; this arrangement allowed them to use their theoretical concepts in practical SEN settings. A similar mixed-method project was conducted by Golder *et al* (2009) who surveyed trainee teachers who had attended lectures and placements in special schools. After their placements, the trainees completed questionnaires. Also, data were obtained via a group discussion. In their placements, the trainees they had to complete a range of core tasks and weekly reflections on their experiences and learning. The questionnaires for the trainee teacher focused on their experiences during their training. After the placements, the teachers participated in small groups to discuss their experiences and share their observations. The common themes that emerged from these discussions provided qualitative data for this study. Working in Scotland, Sosu *et al* (2010) used qualitative semi-structured interviews to explore final year student teachers' conceptions of inclusion, their focus being on their perceptions of the practicalities of implementing inclusion and the advantages and disadvantages.

Many other research studies into teachers' attitudes to inclusion provided methodological guidance for this project. It is not possible to describe them all here, but works of particular use included Winter (2006), Avramidis *et al* (2000), and Ernst and Rogers (2009) who used a new scale to measure high school teachers' attitudes. Other attitudinal enquiries which employed questionnaires, group discussions, and interviews included Engelbrecht *et al* (2003) in South Africa, and Leung and Mak (2010) in Hong Kong. In the Netherlands, a large-scale survey (600 schools and 8200 children) was undertaken by Veen *et al* (2010) who used questionnaires to collect quantitative data on aspects of literacy and numeracy of SEN children

in mainstream classes. On that occasion, the study examined more than just teachers' attitudes; it included a wide range of contextual factors relating to students, parents, and school management. In the USA Ross-Hill (2009) investigated the changing attitudes of regular education teachers towards inclusive education. That study, too, employed a questionnaire and interviews to identify the advantages and disadvantages of inclusion, and social issues in the context of inclusivity.

2.16 Summary:

This chapter has provided an overview of the many issues associated with inclusion. It is a very complex subject comprising numerous inter-related themes: philosophical, ethical, human-rights, legal, political, and pedagogical. Inclusion is a noble ideal but difficult to implement, and it is evident from the numerous previous works cited here that many countries have sought to adopt inclusion, but changes have often been slow and uneven. Saudi Arabia has applied the policy of inclusion with some success, but there have been relatively few studies examining the practice of inclusion in the Saudi system, and even fewer examining the attitudes of teachers. This research has sought to fill this gap in the research record. It is teachers who have the challenging task of putting the policy into practice, and of teaching a prescribed curriculum while at the same time catering for the particular educational requirements of SPLD children in their classes. It can be seen from this review that there is no single 'right' approach to implementing inclusion, but the attitudes of teachers are of central importance – and attitudes are largely shaped by experience and training. A number of studies have applied a mixed-method approach to the examination of teachers' attitudes and training. The following chapter details the approach used in this investigation.

Chapter 3: Methodology

3.1 Introduction:

This chapter critically justifies and details the methodological approach for this research, which examines teachers' attitudes to the inclusion of students with special needs and learning difficulties in mainstream schools in Saudi Arabia. The chapter considers the ontological and epistemological assumptions for the creation of a methodological framework for this study, and it explains the selection of a mixed-method research paradigm. This chapter also examines the mechanisms that have been used in this research including the quantitative and qualitative techniques and their respective data-collection methods. The methodology and its theoretical framework were determined in the light of both the particular features of the topic and the research questions being addressed.

In critical social research the methodology must be in accord with the subject under investigation, and the approach applied to this study was an exploratory/interpretive survey model because I sought to examine and understand a particular real-world issue; in this instance the issue was teachers' attitudes to inclusion and the factors (particularly teachers' attitudes and experiences) influencing the policy and practice of inclusion. My justification for adopting the methodology described below was to apply a coherent design that would adequately address the research questions. An exploratory/interpretive model was selected here because it enables the researcher to scrutinize a topic with a view to generating a *posteriori* hypothesis by examining and interpreting data and by exploring possible links between variables (Bryman, 2008). For example, a researcher may have ideas about a subject (in this instance, inclusion) and about the relationships between relevant factors but may lack confirmatory information or knowledge about the relative importance of those relationships. In this case I had prior experience of Saudi schools and so had developed personal views and ideas about what inclusion entails and how it was being applied, but it was not clear whether my views fairly reflected the broader teaching service. I had a general notion, or hypothesis, about the factors influencing inclusion, so this study was exploratory because it sought data and information from a wider source – from a large number of teachers. The theoretical perspective and the methodology of this project also reflect my personal stance insofar as they take account of my views, work history, and gender, and they respect the culture and norms of Saudi society (Creswell *et al*., 2003).

It must be noted, however, that this work was not confined to a single research paradigm, though it was broadly interpretive and constructivist insofar as it took close account of contextual and experiential factors (Harrits, 2011). Moreover, exploratory enquiries like this enable the researcher more easily to examine new and unexpected social influences without too many confining research restrictions. In other words, if an unforeseen matter emerges then the researcher can examine it further without jeopardizing the integrity of the project. The relative flexibility of an exploratory process suited my project because I sought experiences and ideas that might have varied from my own, and discussions with teachers from other school settings opened up the possibility of very different responses.

While the emphasis on this enquiry was on exploring and interpreting teachers' experiences and views, the paradigm was also transformative because teachers' views were a means to an end – the end being the enhancement of the process of inclusion. It was transformative because it used several methodologies to survey a complex subject in a culturally complex setting, and it is hoped that the outcome will provide a basis for educational and social change (Mertens 2009: 2012). The quantitative component of the project identified key points of concern and the qualitative facilitated in-depth exploration of those points. Furthermore, it was transformative to the extent that, having identified factors influencing inclusion, it is my expectation that the findings (and the resulting recommendations cited in the conclusion) will lead to change, to improvements in the ways by which inclusive practices are implemented.

The primary aim of this research was to critically evaluate the inclusion process in Saudi schools by investigating the attitudes and experiences of the teachers who are responsible for implementing the policy of inclusion. In Saudi Arabia, the government has launched various initiatives to improve learning for students with disabilities, though at present not all teachers are clear about their roles and responsibilities in regard to applying inclusive practices. There is also some lack of awareness about how inclusion should be applied. Having surveyed teachers' attitudes and experiences this report then considers how teachers' knowledge and skills can be developed so as to better facilitate inclusion, and it discusses the implications for pre-service and in-service teacher-training as well as the support required to improve their performance in classrooms.

3.2 Ontological and Epistemological Assumptions:

My interest in examining the subject of inclusion was motivated by my personal concern that progress toward fully-inclusive practices was apparently not proceeding as expected. Consequently, in this research I have addressed a practical, contemporary, real-world issue and so my work should be viewed within the context of a broad, over-arching pragmatic project. I have sought to utilise features of various enquiry paradigms; that is, the basic beliefs about the nature of reality and how it can be understood. To answer the research questions, I adopted a mixed-method approach, and as writers such as Bryman (2008) and Harrits (2011) have noted, the theoretical under-pinning of mixed methods entails various ontological and epistemological assumptions.

Ontology examines the assumptions about the nature of knowledge and reality; epistemology is a way of understanding what kinds of knowledge are possible and it considers the nature of knowledge and the processes to validate knowledge (Healy & Perry 2000). The methodology is concerned with the tools and techniques of the research; it is the design for the research that describes the enquiry techniques along with their justification. The methodology reflects the research paradigms that set the research agenda (Guba, 1990).

The ontological and epistemological assumptions allow the researcher to understand the interrelationship between the main research components and the methodology. The understanding of these elements clarifies any confusion in the theoretical debates and approaches to the study of a social phenomenon. The interaction between the ontology and epistemology enables the researcher to understand the views of others and defend their own position. The ontological assumptions enquire about the nature of existence, which underpins the approach to the project (Sparkes, 1992). The researcher's ontological position discourses the research questions and explores the nature of social reality. The ontological assumptions stimulate the epistemological positions, which then influence the choice of methodology (Bryman, 2004). In social research, epistemological positions include positivism, interpretivism, and critical realism, all of which make different epistemological assumptions.

3.2.1 Ontology:

Before relating these models and concepts to my project it is pertinent here to briefly consider the theoretical issues associated with research. The main aspects of ontology are objectivism and subjectivism. According to objectivism social entities exist in reality,

Subjectivism states that the social phenomenon is created by the perceptions and actions of social actors (Matthews & Ross, 2010). The constructivist paradigm is grounded in relativism that does not believe in objective truth, which can be learned through an enquiry process. This view states that individuals construct truth and senses of their own experiences. That is, reality is independent of any foundational reality; moreover, constructivism assumes that knowledge is socially constructed (Guba & Lincoln, 2001). The constructivist paradigm is suitable for this research as it seeks to gain an insight into the experiences of people with regard to inclusive education in Saudi Arabia. Through constructivism the researcher will be able to understand this situation in Saudi Arabia for SEN education.

Constructivism provides theoretical support for this study which examines teachers' attitudes to inclusion (Richardson & Cortland, 2007). In particular, this study seeks to understand teachers' perceptions and to evaluate the barriers to inclusion. The constructivist approach is relevant to this project because it aims to study social reality and to understand social meaning in an active interpretive framework for human actors.

Constructivism is a philosophical perspective that examines the mind forms and adjusts to the understanding of reality. It is a theory of knowledge that explains what we know and how we know it (Creswell, 2013). Constructivism believes that research depends on theory, and the theoretical assumptions of the research guides them and determines what is understood as a research problem. Also, the researcher determines the theoretical frameworks that are to be used in the research. Constructivists perceive themselves as a part of network that creates knowledge. The constructivist approach does not question why phenomena exist but it aims to understand them without any specific theory of knowledge. The constructivist methodologies work with assumptions instead of specific techniques, and this allows them to create more accurate results that are more relevant in their applicability. Also, this philosophical stance allows the research to avoid overgeneralisation (Mir & Watson, 2000). Furthermore, constructivism does not rely on a readymade or thorough theoretical structure. Social constructivism states that learning results from social interactions in a shared socio-cultural context (Reihlen & Apel, 2007).

3.2.2 Epistemology:

Epistemology is the theory of knowledge, and it has three influences on research; firstly, epistemology influences the relationship between the researcher and participant (Vasilachis, 2011). It strongly shares the researcher's conceptualisation of the participant through detailed collection and analysis of information. Secondly, epistemology influences the quality of methods and assesses the quality of the data. Thirdly, epistemology influences the form and representation in methods. It is a determinant of how researchers communicate with their audience and conceptualises their role along with the analysts and research participants (Carter & Little, 2007).

The central epistemological basis of this project is empiricism; that is, it comprises knowledge and information gained through experiences. According to empiricism we can only know things after we have had relevant experience (commonly referred to as *a posteriori* knowledge) and in this project, I have sought to examine the subject of inclusion by way of the experiences and attitudes of those with immediate involvement in the issue (Audi, 2003). However, in this instance a posteriori knowledge is derived not from objective experimentation but by way of the lived personal involvement of the teachers. As explained in Chapter 1, for cultural reasons it is not possible to examine inclusion directly by measuring its application in classrooms or by questioning/testing the children concerned. Instead I had to explore its application by indirect means, in this study by working with the 'implementers' – the teachers. The results of the questionnaire and discussions are not absolute and they do not provide definitive measures as to the effective implementation of inclusion. Rather, the responses provided by the informants are individualised, personal, and subjective and describe only their own experiences. However, by surveying a large number of people and by identifying recurring common themes from the data provided by the participants it was possible for me to obtain useful information for answering the research questions.

As writers such as Mertens (2012) comment, the epistemological features in research projects such as this can be problematic because the findings are relative, not absolute. That is, the findings refer to specific contexts and situations and hence are usually not universally applicable. Moreover, as I progressed with the enquiry it became increasingly obvious that the data and information were not completely unbiased and hence not generalizable because it entailed the study of other people's experiences. Similarly, the study of social and educational phenomena to some extent reflected my own understandings and my particular interests.

3.3 Interpretivism:

This project also takes account of the concept and theory of interpretivism. In the interpretivist paradigm, the researcher seeks to understand a particular social situation and the enquirer aims to understand the meanings that constitute that action (Creswell, 2003: 2013). According to interpretivism all human action is meaningful, and from an epistemological point of view interpretivism emphasises the contribution of human subjectivity to knowledge without rejecting its objectivity. It can be seen that in this investigation the source of the data was the subjective contribution of the teachers' experiences, yet even though those experiences were personal and individual nevertheless according to the interpretivist the subjective meaning can be understood objectively (Denzin & Lincoln, 2000). My analysis of the data entailed interpreting the information in order to identify common themes which would explain the range of teachers' attitudes to inclusion. For an interpretive study the theoretical framework is important, but such a project requires clear research questions since the interaction between the researcher and subject is important. Interpretivism emphasises an understanding of the differences between humans in our roles as social actors. These approaches emphasise recognising the differences between conducting research among people and not treating them as objects, and in an interpretivist, study the researcher is more emphatic in seeking to understand the world from their point of view (Saunders *et al*, 2009).

The interpretive theory focuses on studying the lived experiences of people within their social context, and in my enquiry the data stemmed from the lived experiences of the teachers and their respective interactions with students who have learning difficulties. The social sciences explore the lived experiences so they can associate certain actions, which can be studied in their social and historical contexts (Vasilachis, 2011). Through this approach the researcher can better understand the social phenomena being studied. The interpretivist believes that reality is socially constructed and based on lived experience, values, norms, culture, and social background. The interpretivist paradigm aims to understand the meaning of events and the intention of human actions as this paradigm is more concerned with understanding human behaviour – in this case the behaviour of both teachers and children. My task, as the interpreter, was to locate common threads which would reveal the factors that may be helping or hindering the process of inclusion.

Also, interpretivism incorporates beliefs, meanings, feelings, and attitudes of social actors in social situations. The interpretivist does not use primary theories to create a world

view but instead it is constructed through interpretations. The researcher in an interpretive study is more involved in the research process; this is why the researcher is involved in communicating with the actors and such interaction allows the researcher to engage in a dialogue with the actors; the interpretation of such conversation allows the researcher to get actors' views in the form of a story that incorporates facts and values (Al-Habil, 2011).

In the light of these accounts of interpretivism it can be seen that this project applied this paradigm because I sought information and data from among the experiences, beliefs, feelings and attitudes of the teachers. However, their experiences were varied and different and so a central part of the process of my enquiry was the identification of common threads of information which, when combined, would answer the research questions.

According to Tuli (2010) the interpretivist–constructivist perspective framework for qualitative research views the world as constructed and interpreted by the experiences of people in a social system. This paradigm seeks to understand real world situations within their own context – here the context being the schools. The interpretive paradigm views human behaviour as regular, and views these patterns created out of meaning systems which are generated by people through their social interaction. Interpretive research seeks to understand the worldview through individuals' own experiences and through quotations of actual conversations from the insider's perspective. In this case I aimed to apply sensitive data-collection methods to create rich in-depth descriptions of the issue of inclusion. This study applied the interpretivist model when examining how the inclusion agenda was being implemented in the Saudi setting. But I wanted to go further and to explore the reasons behind any negative teacher attitudes towards inclusion. The interpretivist paradigm allows the researcher to interact with the main actors in the education field in Saudi Arabia, and this includes interactions with teachers of disabled students, school administrators, and officers in the Ministry of Education.

3.4 Mixed Methods:

Mixed-method research consists of quantitative and qualitative techniques being applied within one study (Creswell, 2003: 2013). This methodology was adopted here, and it can be regarded as pragmatic insofar as it offered the best means of investigating a complex social and educational subject of current concern. Moreover, in doing so it applied a system of philosophy and logic using induction and deduction. This method legitimises the use of multiple approaches to address the research question without restricting the choice for the researcher. Indeed, it enlarges the choice of data acquisition techniques available to the

researcher - questionnaires, discussions, interviews, and observations being the most commonly-adopted techniques. I selected this because I sought the widest possible range of experiences and views from a diverse range of sources.

To answer the questions, I found it necessary to approach the topic from different directions (that is, triangulation), and it was evident that the personal experiences and views of participants can be expressed in varying ways in different media. Through the mixed method techniques the researcher takes an eclectic approach for data selection and for conducting the project. The mixed method also has the great advantage of combining data in different yet complementary forms. However, the epistemology implicit in such an approach does not prescribe specific data-collection or data-analysis method. (Johnson & Onwuegbuzie, 2004).

3.4.1 Triangulation:

An important advantage of the mixed methods approach is that it provides for triangulation; that is, it yields several sets of data which help to answer the research questions. It is a means of looking at an issue from different ways, of garnering a wider range of information than might be derived from a single source, and it is thus a way of ensuring the validity of both the research process and the outcomes. As Bryman (2002: 2004) explains, triangulation is a procedure for validating results because it enlarges the scope, depth and consistency of the investigation. One of my reasons for selecting the mixed methods technique is that the quantitative and qualitative sources of data would enhance the level of validity by complementing each other; if conducted appropriately the qualitative information would expand-on and corroborate quantitative statistical record. Triangulation serves several inter-related functions in the research process, and I sought to benefit from those functions to ensure the soundness of my project. In this work I aimed, firstly, to use the information from the literature review to shape the parameters and the basis of my enquiry. Then I sought to use the qualitative information to illustrate and clarify points that arose from the questionnaire, to explain issues that might have emerged from unexpected responses to the questionnaire, and to provide me with context and understanding of specific points that arose. Triangulation is most productive if conducted in a particular order, and as explained in the next section, in this study the quantitative component (the questionnaire) was undertaken first, the data being useful for shaping the later interview questions.

3.5 Research Sequence:

By using two methods it is possible for the researcher to benefit from the strengths of both quantitative and qualitative information (Johnson *et al*, 2007). Through combining these approaches the researcher can fulfil many aims such as verifying findings, generating complete data, and achieving insights obtained from complementary sources (Creswell, 2003). Because the focus of my project was on exploring and understanding, most attention was given to the later qualitative phase which was of greater duration and entailed more extensive analysis in terms of time and research effort. However, the contribution of the initial quantitative phase was very important too because it helped me to refine the questions to be used in the discussions and interviews.

Quantitative and qualitative approaches can be used sequentially; a preliminary quantitative component can be used to locate unexpected topics, to generate hypotheses, and to develop the content for a subsequent qualitative study. This sequence was adopted here because the survey questionnaire enabled me to identify key issues and concerns which later proved useful for guiding the content and scope of the discussions and interviews. That is, some of the items that emerged from the questionnaire were able to be used explored in closer detail in the discussions. However, as Creswell and Clark (2007) explain, to ensure validity in mixed method research the researcher must still adhere to the methodological assumptions of each method.

According to Doyle *et al* (2009) the research paradigm determines the researcher's worldview and includes epistemology, ontology and methodology. These paradigms determine how the researcher interprets reality and methodology. The researcher's worldview is influenced by the positivist quantitative paradigm or constructivist qualitative tradition. The traditional view argued that these paradigms are distinct and should not be combined. Guba and Lincoln (1988) argued that the research paradigms are not compatible since it is not possible to combine the ontological and epistemology stances of both traditions. Conventionally the researcher has to make a choice between the positivist scientific models of research using a quantitative method or the interpretative linked to qualitative research.

In positivist research, the project is independent and relies on large samples to test the hypothesis. The positivist paradigm avoids any bias in the process of inquiry. The constructivist or qualitative research is an alternative method and aims to examine the human experience. According to constructivism there are multiple realities and different interpretations that can be generated by the research. The constructivist paradigms highlight the reality of others

through detailed descriptions of their experience. The interpretive paradigm is subjective, focusing on the deeper understanding by studying a small sample, and as detailed above, this project can be considered both constructivist and interpretive because I have sought to understand the reality of inclusivity from the descriptions of the participating teachers. Another differentiation between qualitative and quantitative research is the induction and deduction approaches. Quantitative research is an objective process of deduction whereas qualitative processes are subjective and favour induction. The mixed method approach is still relatively new and there is scope for debate on the issues of compatibility between the qualitative and quantitative methods (Doyle *et al*, 2009).

Johnson and Onwuegbuzie (2004) argue that emphasising the utility of both qualitative and quantitative paradigms they can be used together in a single study by leveraging their strengths and minimising their weaknesses. Doyle *et al* (2009) stated that there are many reasons for using the mixed method paradigm; they include the following benefits; triangulation, complementarity, development, initiation, and expansion. Through triangulation the validity of a study can be enhanced through the justification of quantitative and qualitative data. The use of several methods allows the researcher to address questions, which cannot be answered only by the quantitative or qualitative methods. Through the combination of two paradigms the researcher can choose a diverse range of tools.

In light of the various theories and paradigms discussed above, the mixed method approach was adopted here because I examined other options but concluded that it would be best suited for answering the research questions. The basis of the methodology was both positivist and constructivist, quantitative and qualitative, because the nature of the topic being investigated required data being sourced from various perspectives. As explained before, there is not a single 'best' research method, and in this instance, it was essential to apply a blend of information-gathering techniques. This was so because the subject of inclusion (its implementation as well as issues arising from implementation) could not be tested experimentally or examined directly (that is, I could not question or test the children or their families) and so it was necessary to investigate by indirect means. The triangulation applied here was regarded as being appropriate because the topic of interest, and the research questions, could not be examined by one means alone. Like many social issues it could not be answered from just one source; it required multiple 'inputs' or data sources which could provide different perspectives, and the experiences cited by the participants were important for illustrating the key issues of inclusion. Moreover, the mixture of methods facilitated sequential data-gathering which offered the benefit of add-on information. That is, the data from the questionnaire was

used to refine and focus the questions which were, in turn, asked in the group discussion and in the interviews.

The process of triangulation was on-going; the questionnaire data identified some of the key issues of inclusion experienced by the teachers, and thematic analysis of the information provided details and examples of those themes. The three sources of information were inter-related and, when collated, offered answers to the research questions.

3.6.1 Research Setting and Sampling:

This project was conducted with teachers recruited from 50 schools located in Riyadh, the capital of Saudi Arabia, in 2015. After piloting and refining the questionnaire (explained above) I used it to collect information from 209 specialist female teachers who worked with children with specific learning difficulties in mainstream primary schools. Also, the same questionnaire was used to survey 214 non-specialist female teachers who taught mainstream classes in primary schools. Interviews were conducted with 23 expert female teachers who specialised in teaching children with SPLD. The participants were recruited from among the specialist teachers employed by the Ministry of Education to work with SPELD children in the same districts of the capital.

3.6.2 Sampling:

Recruiting a suitable sample is an important step in the research process, and taking account of the 423 teachers surveyed and interviewed it must be noted that my research design cannot be considered as a case study - or even a multiple case study. Rather, it was an exploratory/interpretive survey. My emphasis was on the issue of inclusion and not on individual schools, classes, or children. The sample of teachers and schools was random insofar as the participants responded to an open call, and while it may be possible to make some generalised conclusions about teachers' attitudes to inclusion in schools in Riyadh, the conclusions cannot be said to reflect nation-wide attitudes. Nevertheless, as Creswell (2003) commented, information gleaned from schools in one region can still contribute to policy making

Having issued an open call for teachers to indicate their interest in the project I then contacted 209 specialist teachers of SPLD children and 214 mainstream teachers offering them the opportunity to participate. All 423 offers were accepted, and all completed the questionnaire.

Throughout the sampling process I sought to recruit participants who would adequately represent a cross-section of the female teaching population of the region. For this investigation, I used multiple strategies to select participants (Mason, 2002). The first selection strategy involved stratified sampling, which included selecting an adequate representation of a sub-group in the population. For this study, I invited participation by experienced female teachers in primary schools in Riyadh, the city being divided by the Ministry of Education into administrative regions. Selection was limited to schools in Riyadh only for practical reasons; I am familiar with the central region and its school system and it would not have been practicable (or financially feasible given the travel, costs, and time involved) to work with schools from different cities or towns.

The second phase of recruitment was the cluster sampling; in this instance, it referred to the schools. Initially I invited teachers in all locations in Riyadh, and then used stratified sampling to identify locations and then clusters in order to choose teachers from the selected schools. I focused on recruiting suitable female participants from five regions that had established special-education programmes

The study emphasis was on teachers' experiences of working with children with learning disabilities, such as dyslexia; however, it is important to acknowledge the distinctive culture in Saudi Arabia in order to understand the issue of inclusive education. The concept of inclusion has to be adjusted to the socio-cultural environment of Saudi Arabia as inclusion for boys and girls is different; teaching methods are essentially the same for boys and girls, but they are taught in segregated schools. The inclusive practices described in this study mean the least restrictive environment for SPLD children - but gender separation remains intact. The specific socio-cultural context of Saudi Arabia will affect the fundamental models and lead to differences in implementation of inclusion. The study focuses exclusively on female teachers because only women are allowed to teach girls given the gender separation in schools.

3.7 Qualitative Research:

While in the project design I aimed to give equal weight and importance to both the quantitative and qualitative survey methods, as it transpired much of the most useful and interesting data were derived from the latter. Qualitative research seeks to understand the universal senses that guide human behaviour, and this certainly applies to education and to the human interactions that occur within schools. Qualitative methods have been developed and

refined over time and are now widely accepted as being reliable for exploring complex social processes. In cases such as this they are very effective for surveying a phenomenon from the perspective of the participants in order to uncover their experiences, beliefs, values, and motivations. In this instance, the phenomenon was inclusion and as the researcher I sought the experiences and beliefs of the teachers. Qualitative studies tend to be exploratory in nature and are valuable for gaining insights and for generating hypotheses about a phenomenon so as to examine its antecedents and consequences. As Denzin and Lincoln (2000) explain, qualitative research is conducted in a natural setting and creates text-based data usually through open-ended discussions and observations.

Qualitative research strategies include grounded theory, ethnography, case studies, and phenomenology. Each of these is suited to a specific type of investigation – but it is the nature of both the questions and the subject that determine the research design. In this work I adhered to the processes of grounded theory which entails posing questions, obtaining and analysing relevant data, and then developing concepts and new theories by which the questions can be answered (Creswell, 2003: 2013).

An important element in the qualitative component of my work entailed the use of semi-structured interviews. I aimed to achieve increased reliability by partially structuring these events; that is, I maintained control of the interviews by broadly adhering to the prepared questions, but at the same time I encouraged a relaxed, informal, flexible, conversational atmosphere so as to elicit information that might otherwise be inaccessible (Wengraf, 2001). I also made every effort to establish rapport and trust by having an informal room setting and by assuring the participants of their anonymity. The reliability of the interviews was enhanced by having (with the aid of others) pre-tested the questions and by recording (with permissions) the conversations. Additionally, I aimed to minimise interviewer bias by ensuring that the questions were framed in neutral terms and by not ‘leading’- that is, the questions did not lead or prompt the participants to give a particular response.

The final list of interview questions was compiled following the administering of the questionnaire. Although at the time I had not been able to fully analyse the qualitative data nevertheless a cursory reading of the responses provided a general guide as to the possible areas of concern. The interview questions all focussed on the research questions; that is, although I used the semi-structured approach I aimed to maintain a close concentration on eliciting information that would answer the questions and to avoid being distracted by other irrelevant matters. Regrettably, none of the participants agreed to the interviews being audio-taped,

feeling that any adverse comments they might make could be used against them at a later date. Moreover, they regarded it as being contrary to the Arab practice of confidentiality and privacy. Consequently, I took written notes, a slow process which sometimes interrupted the flow of the conversation and prolonged the discussions. Also, since I had sought to conduct the interviews as a relaxed discussion instead it tended to make the process a more formal question-and-answer procedure – though it did not noticeably diminish the quality, nature, or honesty of the teachers' comments.

3.8 Quantitative Research:

As explained earlier, the initial component of my project involved a quantitative survey. The questions were piloted, checked, and refined prior to administration. I found the results of the questionnaire to be very relevant because, as detailed in the following chapters, they highlighted some of the key concerns of teachers – and in particular the importance of thorough training. Additionally, the responses identified both the advantages of inclusion as well as the obstacles to implementation within the setting of Saudi culture. A further benefit of the results was that they assisted me in shaping the scope and nature of the questions for the interviews.

Quantitative research is the traditional scientific approach favoured by the positivist paradigm, and in this project, it proved to be a useful complement to the qualitative information. The positivist approach is systematic and methodological, the emphasis being on rationality, objectivity and control. Under this model the data are numerical and are subjected to various forms of statistical analysis. The results of quantitative research can be descriptive, correlational, and casual (Walker, 2005: Matthews & Ross, 2010: Creswell, 2013). Quantitative research is very useful for studying general patterns in a population, and to do this it often uses surveys of large samples, the data being garnered by way of questionnaires and fieldwork. Statistical analysis of the data is usually conducted through basic tabulation, cross tabulation, and multivariate analysis. In my project, the survey of 423 teachers yielded important evidence of teachers' attitudes and, equally valuable, their responses highlighted patterns and trends in regard to issues such as the training of teachers who work with SPLD children in mainstream settings.

3.9 Secondary Information and Data:

In regard to the criteria for selecting sources of information, as explained in Section 2.1 (pp. 13-15), for the literature review I sought a very wide range of both primary and secondary sources. Most concerned the conceptual, philosophical, and human rights basis of inclusion

and the practical implications of implementation. Other secondary sources were focused on the formal aspects such as government policies, educational reports, and international protocols. Relatively few of the secondary sources were obtained from Saudi Arabia because government policies and official reports are not so readily available.

In conducting this investigation, I did not directly apply secondary statistical data to my own project – that is, data acquired from other sources. However, secondary statistical data as well as secondary information recorded from interviews and discussions were particularly important for framing the background and the literature review. Although relatively few relevant studies have been conducted of the Saudi educational system, nevertheless the few that have been completed provided very useful background material and were helpful points of comparison. In general, secondary data refers to statistical and quantitative material which is already available from other sources, and they include databases, journals, newspapers, books, official documents, and interview transcripts. Secondary data are useful for initial analysis and for developing research questions; moreover, they have the advantage of being easily accessed and inexpensive. However, the disadvantages of such data are that they can be out-dated and may not directly respond to the research questions (Saunders *et al*, 2009). The main secondary sources for this study include academic journals on inclusive education in the West and in Arab countries, previous surveys of teachers' attitudes, and reports about the implementation of inclusive education in Arab countries (see Section 2.1, pp 13-14). It should be noted that the secondary sources consulted here provided essential background information, points of reference, and comparisons for this enquiry, but they did not form part of the processes of data collection and analysis.

3.10 Primary Data:

Primary data were collected by the researcher specifically for the study, and as explained above, the main sources were the quantitative questionnaire and the semi-structured interviews, discussions, and observations As Saunders *et al* (2009) and Creswell (2013) write, primary data can take a number of forms, they can be generalised or specific, exploratory or confirmatory. In this case my purpose was exploratory and interpretive, to obtain data which would shed light on a relatively new and unexamined issue

3.11 Interviews:

I conducted interviews with 23 experienced teachers who, at the time of my study, were working with special-needs children within mainstream schools, their responses providing

information which was central to this enquiry. Individual interviews are a major data-collection tool in qualitative or social research. They are categorised as structured, semi-structured, or unstructured – each being valuable as a means of obtaining information and in-depth knowledge on a subject (Robson, 2002: Creswell, 2013). Interviews vary according to their degree of standardisation; a fully-structured interview has pre-determined questions, the interviewer strictly adhering to the prepared script while offering no opportunity for additional questions or comments. A semi-structured interview also has pre-determined questions, but it can be modified during the course of the interview, and it offers scope for new avenues of information to be explored. In an unstructured interview the researcher works within an area of interest and engages in a discussion with the respondent, this often being an informal conversation rather than a question-and-answer format (Robson, 2002). For this work, I elected the semi-structured approach because it offered scope for gathering a wide range of responses and data. The fully-structured system would have been too rigid because I was seeking the widest possible range of information on the process of inclusion, and I anticipated (correctly) that topics and issues might emerge with which I was unfamiliar. Likewise, I rejected the unstructured approach because I needed to maintain some degree of control over the conversation if I was to avoid extraneous or irrelevant comments that would not help me to answer the questions.

3.11.1 Semi-Structured Interviews:

Semi-structured interviews are favoured for qualitative research because they contain standardised questions while still providing scope for both researcher and participant to pursue other lines of enquiry that might arise unexpectedly. Flexibility is an advantage, but a drawback is that it can be time consuming and in some cases, can collect inaccurate responses (Robson, 2002). In this interview type the researcher probes the respondent with an initial topic and the enquiry line is guided by the responses. The semi-structured interview has a theme which can be altered as the interview progresses (Robson, 2002).

After obtaining the appropriate approvals from the Ministry of Education the researcher randomly selected schools within the designated area in order to invite interested and suitable teachers to participate in interviews. This approach was adopted because the project needed to be manageable in terms of numbers of participants and their geographical distribution. Moreover, that quarter of Riyadh contains a large number of primary schools which are quite representative of the city. Interview and data-collection processes are important to research

projects because, if conducted correctly, they ensure the integrity and validity of the enquiry. As noted above, the selection criteria applied here were that the teachers had to be female, trained at tertiary level, with several years' experience working with SEN children in mainstream primary schools. These criteria were selected because I needed teachers who were experienced in working in mainstream and specialist settings, their experience, training, and knowledge on inclusion being important information for answering the research questions. I provided full prior information about the purpose of the project so that each was aware of what sort of information was being sought. The background to the project was pertinent insofar as it enabled the participants to understand and appreciate the relevance of their experiences to the issue of inclusion; additionally, as it transpired it helped keep the focus of the interviews on the main subject. Semi-structured interviews were conducted with 23 participants who had also completed the questionnaire. The interviews were of about one-hour duration and were conducted in suitable quiet, private rooms within the schools. A comfortable, neutral setting for interviews such as these is important because individuals will speak with confidence if they feel that they are free from constraints or from the fear of interference. With the agreement of the participants written records were made by the interviewer. The transcription of one such interview is provided in the appendices (see page 272).

3.12 Questionnaire:

Questionnaires are a commonly-used method of collecting primary quantitative data; they have the advantages of being self-administered (at a time convenient to the respondent), they allow the researcher to interact with the respondents by way of feedback, and they can be used for large-scale surveys – all of these factors being taken into consideration in my decision to apply this technique. To be effective a questionnaire must be carefully structured and crafted, comprehensible by all users, and free of ambiguities and repetitions (Creswell, 2003: 2013). Also, they allow many types of questions; open-ended and closed-ended, and various scales (such as Likert-type scales) can be employed (Robson, 2002). The questionnaire for this study was adapted from Avramidis and Kalyva (2007) and from Alothman (2009), and it was specifically designed to address the issues posed in the research questions. With the assistance of several colleagues experienced in research I pre-tested the questionnaire, refining and amending several of the questions so that they were suitable for the cohort of Saudi women participants.

The questionnaire which I used (see Appendix) consisted of seven sections. The first asked for basic demographic information and the second sought information about teachers' perceptions of where children with different types of impairment should be taught. The teachers were provided with six options including 'home', 'special school', and 'mainstream school plus in-school support'. This section offered teachers the opportunity to indicate a wide range of possible educational settings. The third section was central to the study and asked 25 questions about aspects of inclusion, teachers being asked to express their views from several options using a Likert scale; the optional responses were; strongly agree, agree, disagree, strongly disagree. Turning to the matter of teacher training, section four sought information about the participants' preparedness to work with children with different impairments such as visual impairment, intellectual disability, and autism. For this section four possible response were offered, the range being from 'extremely prepared' to 'not prepared'.

The next section, number five, consisted of 20 questions about possible barriers and obstacles to full inclusion, five responses being available. Following on from the theme in section five, the next section asked about possible strategies and methods for improving the implementation of inclusion; for this question teachers could select from ten options which indicated their level of support. Finally, the last two questions were open-ended, teachers being asked, firstly, to write (in their own words) the merits or demerits of using special resources rooms within the settings of mainstream schools, and finally, the differences in attitude between specialist teachers of SEN children and mainstream teachers.

The questionnaire was composed in English but translated into Arabic.

3.13 Translation:

Translation is always challenging, and as Hassan (2014) explains, this is especially so for projects such as this because of the range of subtle distinctions between the use of words and expressions in both English and Arabic. I am a native speaker of Arabic and so it was relatively easy for me to frame the questions with correct grammar and to conduct the interviews with expressions and pronunciations typical of the Riyadh region. For this work the questionnaire was developed in English and then translated and piloted in Arabic. This arrangement was followed because I was able to benefit from the structures of previous studies. However, the interview questions were composed in Arabic and then translated into English. The analysis and reporting of findings were completed in English, these processes being methodologically challenging. This entailed checking terms and expressions with experienced

translators, and these various steps required considerable time. The interviews were conducted in Arabic and the observations which I made were also recorded in Arabic.

3.14 Data Analysis:

In this work I was faced with the tasks of analysing both the quantitative data and the qualitative information. The processes for examining the former have been described in the preceding section. The methodologies for analysing and interpreting have been used in previous studies and so I was assisted by a number of models of good practice. Also, there are various scholarly advisory publications for guiding the new researcher.

Identifying themes from a large volume of qualitative data can be demanding because the researcher must glean common threads and patterns from among disparate information. Writers (e.g. Creswell, 2003) have proposed a number of approaches including word analysis (counting word repetition, and linguistic features) and locating missing information. In this project thematic analysis was less challenging because the investigation was tightly focussed on the participants' teaching experiences in regard to inclusion. As recommended by writers on research methods, I sought to do analysis (albeit informally) progressively from the outset of both components of this work. That is, I continued to evaluate whether the data and information I was receiving were pertinent to the questions. Data analysis and thematic identification are on-going aspects of research, and the themes emerged directly from the responses to the interview questions; moreover, although the interview was semi-structured nevertheless the responses revealed mainly self-evident themes and patterns without many unexpected side issues. For example, questions about the resource room and questions about aspects of inclusion yielded a limited range of replies, usually positive/negative or descriptive accounts.

In my work, the survey analysis entailed converting the data into usable information, initially by editing the responses and eliminating any duplications. I then conducted cross tabulations and employed SPSS software as an analytical tool to calculate frequency distributions. [The SPSS software has had many iterations; it has been refined and improved over several decades and is now regarded as a reliable instrument to aid analysis. After some initial difficulties, I found it easy to apply.] Chi square tests were used to examine differences between the participants' categories of responses. The qualitative data were analysed by reviewing the interview transcripts and by adopting a coding frame to identify the main themes

and any related issues. The qualitative data-analysis is descriptive, thus enabling me to identify trends and patterns. The qualitative data were also coded and categorised to create theories from emerging themes.

The task of coding the qualitative data was quite time consuming and challenging, but various themes emerged – these being discussed below. For the qualitative analysis I adopted a system of two-phase coding (Saldana 2015). The first entailed initial scrutiny of the data looking for general concepts and categories which would form the units of analysis. For example, I noted references to teachers' understanding of what is meant by 'inclusion'. Similarly, I looked for statements about teachers' perceptions of the implementation of inclusion, and I noted categories of their experiences (both positive and negative) about how inclusion was working in mainstream settings. The second phase required re-reading the transcripts with a view to more detailed information on points of detail that would provide answers to the questions.

3.15 Ethical Considerations:

Prior to commencing the field-work I obtained all necessary access approvals from the University of Plymouth, the Saudi Ministry of Education, and from school principals. Within Saudi society ethical and moral issues are closely integrated with cultural and religious protocols, thus while it was necessary to obtain the appropriate approvals it was equally important to establish my *bona fides.* It must be noted that professional and personal contacts can be useful in accessing important organisations for research such as this, and I was assisted by my familiarity with the school system. As a Saudi citizen and a teacher, I am very aware of the strict conventions for working with females in the school system and so I was able to establish a high degree of trust with the senior echelons of the Ministry of Education and with others in authority. Similarly, when approaching the principals of schools, I was able to demonstrate my capacity to work sensitively with the teacher survey-participants. The participants were fully informed of the purpose of the study; they were advised of their right to withdraw at any time, and they were advised of the steps taken to ensure anonymity and the confidentiality of their contributions. Teachers and principals were assured of the confidentiality of the survey, and when demonstrating to principals the contents of both the questionnaire and the interview questions I confirmed that the personal, private, and intimate details of the children would not be compromised. For instance, by using pseudonyms in the results and findings, and ensuring that individual schools were not identifiable. The research

supervisor was provided with information on all ethical issues, and the researcher ensured that no one was harmed as a result of this work (Matthews & Ross, 2010).

It should be noted here that no particular ethical challenges emerged during the survey process. Being aware of Saudi social protocols and requirements for professional behaviour I was able to provide all necessary assurances in order to gain prior approval. It was not necessary to offer any incentives to attract participants; indeed all who agreed to be surveyed were keen to offer their views and to recount their experiences. However, as noted below, none agreed to have their interview audio-recorded. This was not due to any fears of discipline should their comments ever be revealed; instead it was just an expression of the Arab preference for privacy and confidentiality in all matters.

3.16 Summary:

This chapter has detailed the research approach adopted for this investigation, also explaining the theoretical justification for the methodology. In undertaking this project, it was necessary to adopt a theoretical framework, and in this instance the ontological basis of the enquiry is that it is possible to know, learn about, and understand a real-world situation. This assumption leads to the research questions which seek information about a specific issue – in this instance the implementation of inclusion. The methodology was similarly shaped by the principles of epistemology, and consequently the nature and value of the information being sought here has influenced the research method; in particular, the use of multiple sources of data and information in order to obtain an accurate understanding of the topic of inclusion.

After reviewing the options, the approach regarded as best suited to answer the research questions was the mixed-method research procedure. In this study, the methods were both quantitative and qualitative: primary quantitative data were obtained from teachers by way of a questionnaire, and qualitative information was sought through semi-structured interviews and discussions with a smaller number of teachers who specialise in working with children with SPLD. Secondary data were obtained from a wide variety of sources; official government reports, school records, scholarly research reports, and the media. These data were analysed by the researcher, much of it being examined with the aid of software programs.

The results are detailed in the following chapter.

Chapter 4: Data Analysis

Quantitative Analysis

4.1 Introduction:

This chapter analyses the data generated from both the questionnaire and the interviews.
As explained above, this project adopted a mixed-method research approach because it would yield different forms of data (quantitative and qualitative) and so was considered best suited to answering the research questions. The methodology comprised an initial questionnaire survey of teachers' experiences and views of inclusion, this being followed by semi-structured interviews in which participants were asked prepared questions relating to the project theme. The questionnaire responses in regard to the relative merits of inclusion are described below, following which is the statistical analysis of all the sections of the quantitative survey, with particular emphasis on the experiences of teachers concerning inclusion. Finally, the statistics are evaluated in the light of the research questions. The demographic features of the participants are listed, and then follows the teachers' views regarding the placement of children with special educational needs.
As shown in this chapter, the questionnaire yielded much useful statistical data on a wide range of aspects of inclusion, but in many respects it was the interview data which produced the most useful information because teachers were able to explain their experiences and views more fully. The subsequent section contains the analysis of the qualitative responses. The volume of data from the interviews was substantial, the method of analysis being explained above (see 3.14, p 67). To illustrate the themes and key points that emerged from the analysis, considerable use is made of quotations from the teachers' comments. In considering the two components of this project it was evident later that the questionnaire provided a broad overview of teachers' perspectives, experiences, and understandings of inclusion, these being then expanded during the course of the interviews. The two components were certainly complementary and while it cannot be said that one component was more important than the other, nevertheless the qualitative data from the interviews was especially helpful in shedding more light on the key issues relating to inclusion. Indeed, this project confirmed the benefits described in previous literature; that is, questionnaires can yield the broad parameters pertaining to the topic, but the interviews provide the deeper details on points of importance.

As detailed in Chapter 3, teachers from 50 schools agreed to participate in a survey about their experiences of teaching children who had special educational needs. Their responses to both a questionnaire and interview questions are analysed below, and the many

variables involved are examined by means of descriptive statistics (e.g. frequency, percentages, mean, standard deviation, and ranking). Inferential statistics are used to determine the effects of demographic/background variables (e.g. age, experience, education, training in SEN) on the different scales used in this questionnaire (e.g. the effect of participants' education on their rating of barriers and methods of improving inclusion). Also, the data derived from the semi-structured interviews are used to complement and illustrate the findings in regard to the research questions.

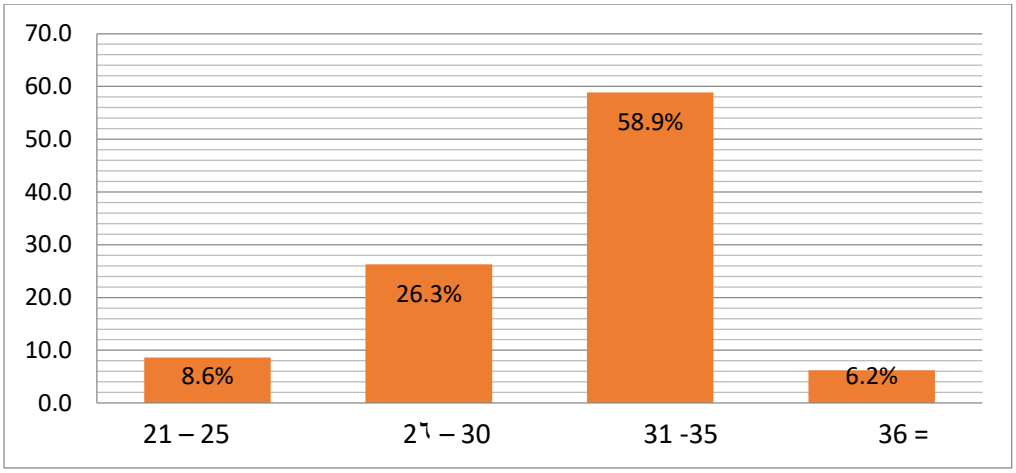
The processes for analysing the data consisted of several steps (Miles & Huberman, 2013). Initially, the questionnaire data were subject to statistical analysis, the results being processed in the form of charts and graphs as shown below. I found this phase to be very useful because it identified key experiences which shaped the participants' attitudes to inclusion, and it also provided a structure for examining the qualitative information garnered from the interviews. The analysis was sequential, though a second review was concurrent. A framework provided a basis for the thematic analysis and for determining categories of responses. Also, in respect of the qualitative data the themes were identified by using codes to isolate the key concepts and issues of concern to the participants. The qualitative data were in textual form, and were translated and transcribed in English.

4.2 Background information:

4.2.1 Age:

As explained above (see Methodology), the participants were recruited by way of convenience sampling from 50 primary schools in metropolitan Riyadh. Of 214 teachers who agreed to participate in this study 209 fully completed the questionnaires (97% response rate). For the purposes of this research the ages of the participants were categorised as follows: 21-25 years of age; 26-30 years; 31-35 years; and 36 years or older. Figure 1 shows the percentage of participants under each category. The majority were aged 31-35 (59%), this was followed by 26% of the participants who were aged 26-30; 9% were between 21 and 25; and finally 6.2% were 36 years or older.

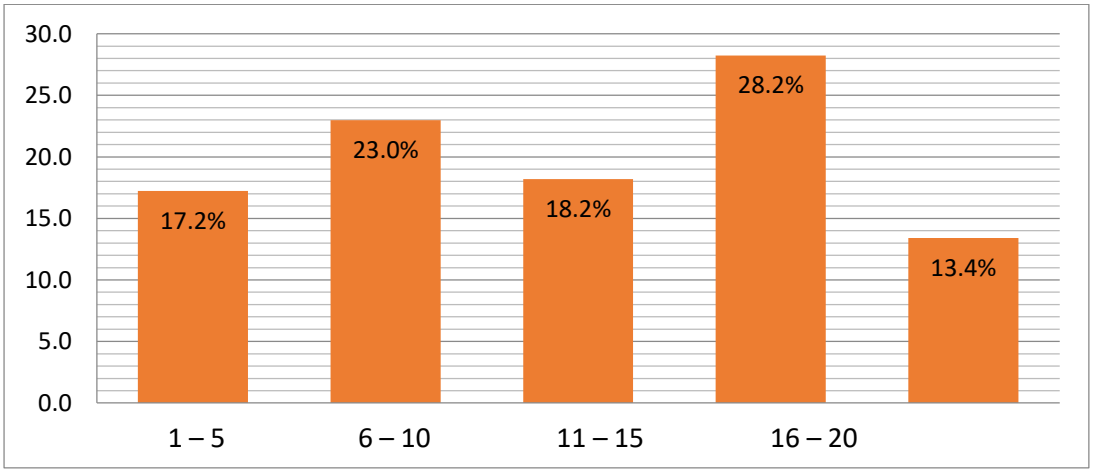
4.2.1.1 Figure 1: participants' ages



4.2.2 Experience:

Participants were asked to indicate their years of experience as teachers by selecting one of five categories. The levels of experience varied across the categories; 28% reported experience between 16-20 years, followed by 23% of the participants who had 6-10 years of experience. Eighteen percent had 11-15 years of experience while 17% had 1-5 years' experience, and lastly 13% had an experience of 21 years or above (figure 2).

4.2.2.1 Figure 2: participants' level of experience



The above two graphs show that the participants were quite experienced; almost two-thirds were aged over 31 and over half had more than ten years' experience as classroom teachers.

4.2.3 School type:

Note:

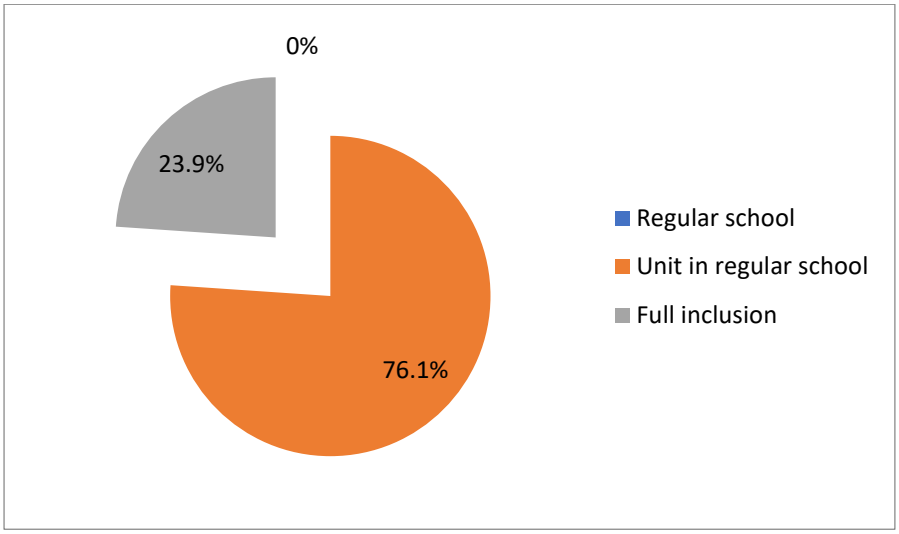
As explained above (see methodology chapter), Saudi Arabia has three types of school pertinent to this study; firstly, mainstream (or regular) schools which do not cater for the inclusion of SEN children; secondly, mainstream schools which have within their precincts special units (or resource rooms) which SEN children can attend: thirdly, mainstream schools which are fully inclusive and in which SEN children attend mainstream classes all/most of the time.

Enrolments in primary schools vary widely. Some may have only 100 or so: other have several hundred girls. In primary schools, the pupils are typically aged between five and 12.

Most government primary schools now apply the policy of inclusion and are now equipped with resource rooms (see account in Appendix, p 273).

In the questionnaire teachers were asked to indicate the type of school in which they worked; of the three types of schools (see box) it was shown that 76% of the participants worked in a unit within a mainstream school, while 24% work in a school with full inclusion. Despite invitations to many schools no participant reported working in a non-inclusive mainstream school (figure 3).

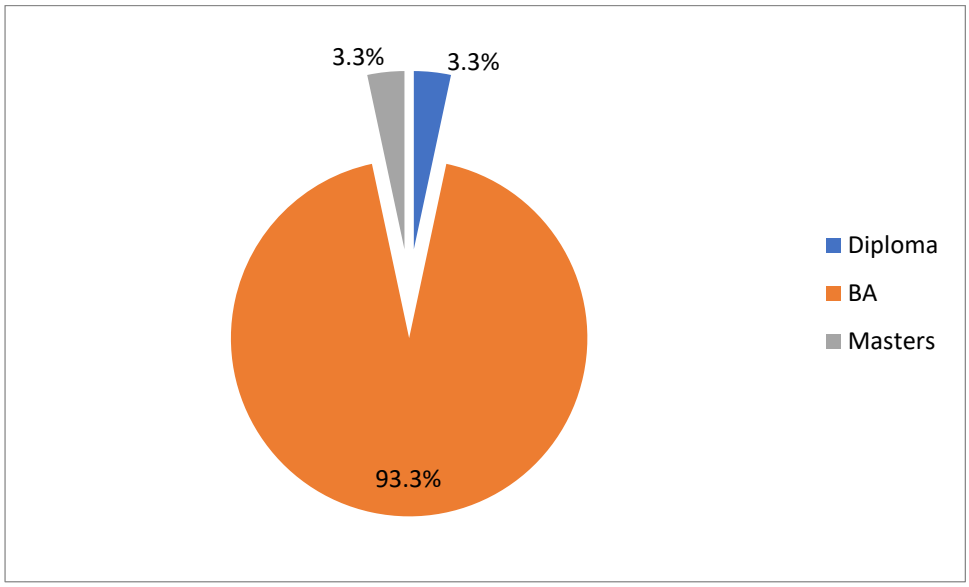
4.2.3.1 Figure 3: Schools' type and inclusion



4.2.4 Education:

In terms of their education, participants were asked to indicate their highest professional qualification in the field of SEN. The majority stated that they had a bachelor's degree in SEN education (93%) while 3% stated that they had a diploma and 3% had a masters' degree. No participant indicated other qualifications (figure 4).

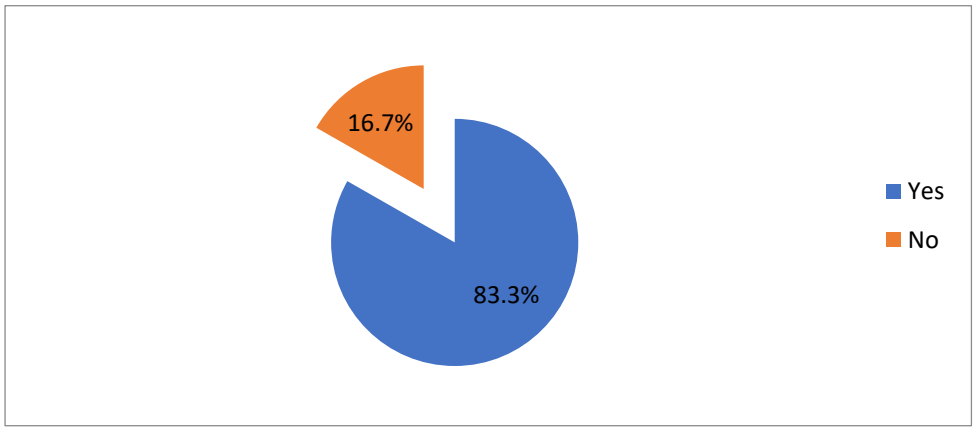
4.2.4.1 Figure 4: Participants level of education



4.2.5 Training in SEN:

Teachers were asked to state whether or not they had received training in SEN; 17% indicated that they had not received training while the other 83% indicated some level of training in SEN (figure 5).

4.2.5.1 Figure 5: teachers' training in SEN



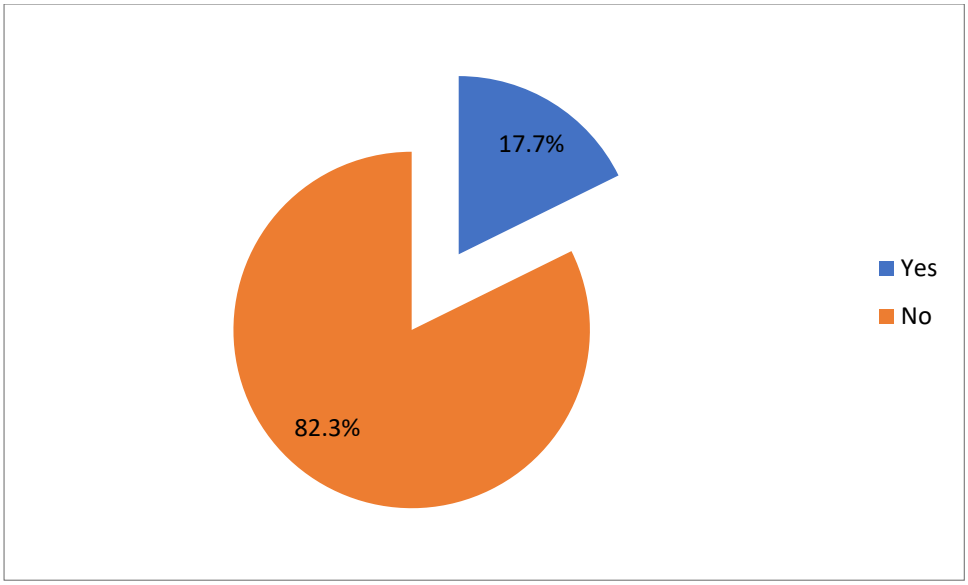
The relevance of the two sections above is that they show that most teachers had attained at least a BA degree, and most (83.3%) had received some training in how to work with SEN children.

4.2.6 Contact time with SEN children (out of work):

The survey asked if the teachers had any contact time with students with SEN other than during work time (i.e. outside school). In response, it was found that 18% had some outside contact with SEN children while 82% had no contact (figure 6).

As discussed below, this limited exposure to SEN children in settings other than school may have influenced the attitudes to inclusion of some teachers.

4.2.6.1 Figure 6: participants' contact with SEN children outside school



4.3 Perceptions about placement:

In this section participants were asked to indicate their views regarding the educational settings or environments which would be most suitable for teaching girls with particular needs. The responses in tabular form are shown as Table 1 in the Appendices. Respondents were asked to select from among seven options – these being the categories of disabilities/impairments most commonly used in Saudi educational literature; namely, Visual impairment, Hearing impairment, Physical Disability, Intellectual Disability, Challenging Behaviour, Learning Difficulties, and Autism). Six optional settings were listed in the questionnaire; three settings [Home, Residential Care, and Special School] were listed even though they do not form part of this study. These three were included because they are educational alternatives available to

Saudi parents and teachers. However, the focus of this survey is upon inclusive schools and so the three other options were: Special Class in a Mainstream School, Inclusive School containing Out-class Support, and Inclusive School providing In-class Support. (See Appendices Table 1).

For visual impairment**,** it appears that most teachers prefer children to be placed in a special class in a mainstream school (32%), followed by a special school (24%), and inclusion with in-class support (20%). Home placement was selected by only 3%. For Hearing Impairment, again a special class in a mainstream school was the main choice (33%) followed by a special school (23%) and inclusion and in-class support (20%). 'Home' again received the lowest preference (3%). For physical disabilities, almost 39% stated that the setting should be inclusion and in-class support. This was followed by a special class in a mainstream school setting (19%) and a special school (16%). The lowest preference was home (2%). For intellectual disability, it was shown that the majority of participants supported a special school setting (36%) followed by a special class in a mainstream school (33%); 12% indicated a preference for residential care, and home was selected by only 3%. In regard to children displaying challenging behaviour, 27% of teachers recommended that they be taught in special schools, 22% suggested special classes in mainstream schools; inclusion and in-class support were selected by 21%, while a similar percentage of participants stated inclusion and out-class support (21%). Home setting received the lowest percentage (3%). For learning difficulty inclusion and out-class support was the main setting chosen by the teachers (54%); this was followed by inclusion and in-class support (19%), and special class in a mainstream school (13%). Home and residential care received the same percentages (3%). Finally, according to the participants, autistic children should be taught in special schools (41%), followed by a special class in a mainstream school (28%). Residential care and inclusion without-class support received the same percentage (10%). Home setting showed the least percentage (3%).

Overall, it was found that participants considered that a special class within the campus of a mainstream school (but separated from the mainstream classes) was best suited for children with visual impairment, hearing impairment, and mild intellectual disabilities; special schools were felt to be best for children with challenging behaviour, intellectual disabilities, and autism. Inclusion and out-class support was identified as the best setting for those with some mild learning difficulties while inclusion and in-class support was selected as the best setting for children with physical disabilities. Across all types of disabilities, the home setting and residential care were regarded as the least preferable locations (See Table 1 in the Appendices).

4.4.1 Teachers' perspectives: advantages of including SEN children in mainstream classes:

In this section participants were asked to describe their agreement or disagreement (on a 5-point scale) with 14 statements regarding the advantages of inclusion for students with special educational needs. Table 2 (see Appendices) summarises the answers descriptively; by reviewing the mean scores and the ranking it was evident that the highest agreement was generated for the statement "Inclusion is socially advantageous for girls with special needs" (M=4.37) followed by the statement that "Girls with exceptional needs should be given every opportunity to function in an integrated classroom" (M=4.31). Thirdly, there was also high agreement on the statement "A good approach to managing inclusive classrooms is to have a special education teacher be responsible for instructing the girls with special needs" (M=4.29). On the other side of the scale, the lowest ranked statement was "Girls with special needs have the right to be educated in the same classroom as typically developing girls" (M=3.93), followed by the statement that "Girls with special needs in inclusive classrooms develop a better self-concept than in a self-contained classroom" (M=3.80) and finally the statement that "The challenge of a mainstream education classroom promotes academic growth among girls with" (M=3.79). Overall it can be seen in Table 2 (see Appendices) that there was more agreement with all statements compared to the levels of disagreement. This shows that, on the whole, participants recognised the advantages of inclusion for SEN students outlined in the statements.

4.4.2 Disadvantages of including SEN children in mainstream classes:

In this part of the questionnaire participants were asked to state their level of agreement (using a 5-point scale) on 10 statements/items reflecting the disadvantages of inclusion for SEN students. Using descriptive statistics (see Appendices Table 3), it can be seen that the highest agreement was generated for the statement "the individual needs of girls with disabilities cannot be addressed adequately by a mainstream education teacher" (M=4.12). This was followed by "The behaviours of girls with special needs require significantly more teacher-directed attention than those of typically developing girls" (M=3.69), and thirdly "Parents of girls with exceptional educational needs require more supportive services from teachers than parents of typically developing girls" (M= (3.61). The least agreement was generated for the following three disadvantages "Girls with exceptional needs are likely to be isolated by

typically developing girls in inclusive classrooms" (M=3.19), followed by "Most special education teachers lack an appropriate knowledge base to educate typically developing girls effectively" (M=3.09). The least agreement was generated for the statement explaining that "Isolation in a special class does not have a negative effect on the social and emotional development of girls prior to middle school" (M=2.40).

4.4.3 Research Question 2:

In light of the results of the questionnaire it is appropriate at this point to summarise the advantages and disadvantages of inclusion in respect of the second research question. Firstly, most expressed support for the principle and concept of inclusion. Also, the teachers cited a number of advantages, most concerning the social benefits of inclusion. That is, most noted that girls with specific needs enjoy some benefits from inclusion insofar as it enhances their sense of well-being and self-esteem. However, the support for inclusion was not total or unqualified, most stating that it works best if there is a specialist support teacher present in the mainstream classroom. However, these views seem rather contradictory because on the one hand the teachers voice support for inclusion but on the other they want a specialist present so that they (the mainstream teachers) can concentrate on working with the mainstream children. This seems, to some extent at least, to be a reversion to segregation whereby the SEN children are being treated separately – albeit while in the same room. This apparent contradiction becomes more obvious when the disadvantages are considered because the responses show that while acknowledging the social disadvantages of segregation the teachers consider that SEN girls (or at least many of them) cannot adequately be taught in a mainstream setting. It is evident that despite the ideal of inclusion the practicalities of full inclusion are daunting; teachers find it too difficult to cater for the needs of SEN children while simultaneously providing instruction for the mainstream girls. This issue is considered in more detail in the discussion chapter.

4.5 Preparedness to implement inclusion:

Using a 4-point scale previously validated, participants were asked to describe their level of preparedness to implement inclusion according to disability type, with reference to the seven types of disabilities listed above. As can be seen in Table 4 (below), the degree of preparedness was spread fairly evenly across the disabilities, though there are two noticeable differences. In regard to autism it can be seen that 44.2% said that they were 'not prepared' and a further 29.3% were only somewhat prepared. That is, about three-quarters of teachers were insufficiently trained or skilled to work with autistic children. Conversely, about 95% claimed

that they were suitably prepared for teaching children with learning difficulties. Table 4 shows the levels pf preparedness reported by the participants.

4.5.1 Table 4: participants' preparedness to implement inclusion based on disability

	Extremely prepared	**Very prepared**	**Somewhat prepared**	**Not prepared**
Visual impairment	22.1%	21.2%	27.9%	28.8%
Hearing impairment	18.3%	22.1%	32.7%	26.9%
Physical	29.8%	26.9%	22.6%	20.7%
Intellectual disability	14.4%	16.3%	28.4%	40.9%
Challenging behaviour	10.1%	27.9%	34.1%	27.9%
Learning difficulties	80.3%	14.9%	4.3%	0.5%
Autism	10.1%	16.3%	29.3%	44.2%

4.6 Impediments to inclusion:

Data for the responses to this question are summarised in Table 5 (see Appendices). Participants were asked to indicate their agreement (5-points) on 20 items which reflect barriers to inclusion. They were asked to rate these statements based on their experience, though the listed options were not defined as barriers in the questionnaire. It can be seen (Table 5) that there was a high degree of consistency among participants in all statements; i.e. they are all seen as factors that can impede inclusion. However, some statements were ranked higher than others based on the mean scores. The statement which had the most numerous support was "Classrooms do not accommodate girls with disabilities" (M=4.43). This was followed by "Lack of equipment and appropriate educational materials" (M=4.42), and thirdly it was agreed that "Class size or large teacher/pupil ratio" (M=4.40) could be an obstacle. The statement with the lowest level of support was "Non-acceptance by other parents" (M=3.74); this was followed by "Non-acceptance by other girls" (M=3.60), and finally "Non-acceptance by parents of SEN girls" (M=3.42). Overall it is evident that all of these statements show general recognition of those factors that can act as obstructions to classroom inclusion.

4.7 Methods for improving inclusive practices:

Teachers were asked to rate 10 methods that could improve inclusive practices in schools. They were asked to rank them to give each a score from 1 (least important) to 10 (most important). Table 6 (See Appendices) shows the numbers and percentages of responses across all the options (1-10). Also, the mean was calculated for each and then items were ranked on that basis. When reviewing the mean scores and ranks for all methods it can be seen that the statement "Direct teaching experience with girls with disabilities" received most support (M=8.75). This was followed by "In-service training/workshops" which generated a high mean score of M=8.41. Third was "Exposure to girls with disabilities" which generated a mean score of (M=8.35). Methods regarded as being of lowest benefit were "Independent reading" (M=6.88), "Collaborative experiences with university faculty" (M=6.84), and finally the method with the lowest level of support was "Research involvement" (M=6.81). By looking at all methods of improving inclusive education it can be concluded that they are all important; that is, they have all generated a mean score of at least M=6.81 which is considered in the top half of the scale.

4.8 Reliability of the questionnaire scales:

After descriptively explaining the data it is essential to ensure the reliability of each of the main scales. Scales used here were either measured on a 5-point Likert scale or a 10-point scale. The internal reliability (consistency) is tested through Cronbach's alpha, a test that measures the consistency between all items within the scale, this being represented by the reliability coefficient which ranges between 0 and 1 (0% to 100% consistency). Reliable scales reflect that the scale measures for the same thing. The table below shows the outcomes generated when conducting a Cronbach's Alpha reliability test. Reliability between 0.7 and 0.9 is preferred and acceptable, however reliability as low as 0.6 can be deemed acceptable (Nunnally & Bernstein, 1994). For the advantages of inclusion, the reliability was found to be 0.899 (90%), and for the disadvantages it was found to be 0.624 (62%); in regard to the scale used to identify impediments and obstacles, it was found to be 0.876 (88%); and finally, for the methods it was found to be 0.910 (91%).

4.8.1 Table 7: Advantages of inclusion

Reliability Statistics

Cronbach's Alpha	N of Items
.899	14

4.8.2 Table 8: Disadvantages of inclusion

Reliability Statistics

Cronbach's Alpha	N of Items
.624	10

4.8.3 Table 9: Obstacles to inclusion

Reliability Statistics

Cronbach's Alpha	N of Items
.876	20

4.8.4 Table 10: Methods for improving inclusive practices

Reliability Statistics

Cronbach's Alpha	N of Items
.910	10

4.9 Computing variables and descriptive statistics:

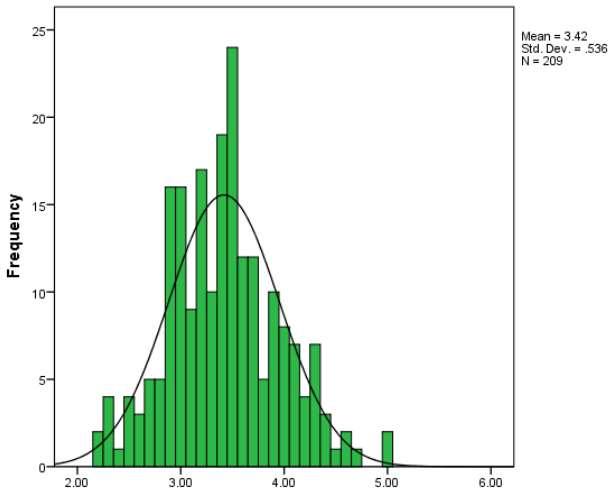
The questionnaire consisted of four main research issues each of which was answered on either a 5-point Likert scale or a 10-point importance scale. These concerned the advantages of inclusion of SEN students, the disadvantages of inclusion, the barriers to inclusion, and methods for improving inclusion. Each of these issues contained a number of items. Rather than dealing with each item separately in respect of the scales used, I computed the variables and calculated four means, one per scale. All items within each scale were added, and their sum was divided by the number of items within the questionnaire. This has led to four new statistics, one per scale.

4.10 Data Examination:

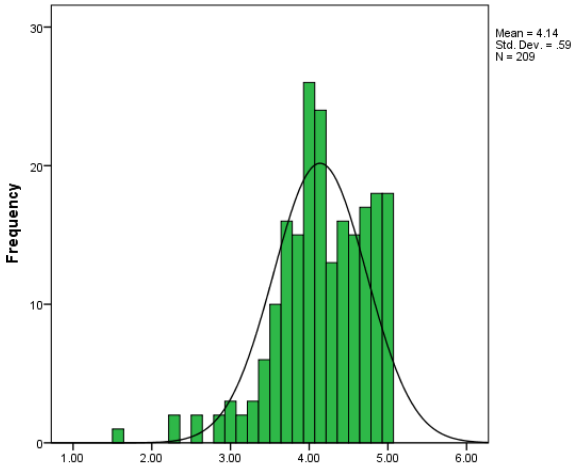
It is an essential step to examine the types of data in order to conduct further analysis (inferential statistics), and so the data need to be examined to judge whether it is parametric or non-parametric. For the data to be parametric it has to be of an interval level of measurement and it has to be normally distributed around the mean (Rosner, 20‧0: Chan, 2003). Since all four scales were considered of an interval type of measurement, whether it is 5 or 10 points, the data are judged to meet this condition. Next the data need to satisfy the normality condition; that is, the values within each of the dependent variables (based on frequency) has to fall around the mean with few extreme scores in a Bell-shaped histogram. This can be examined through the Skewness (the spread around the mean) and Kurtosis (the peak of the histogram) values

shown in table 10 (see Appendices). Skewness and Kurtosis values within +2/-1 will reflect normal distribution. By observing the outcomes all variables can be judged whether they are normally distributed. Further evidence can be seen in the histograms below, most of the values falling around the mean while following a normal curve.

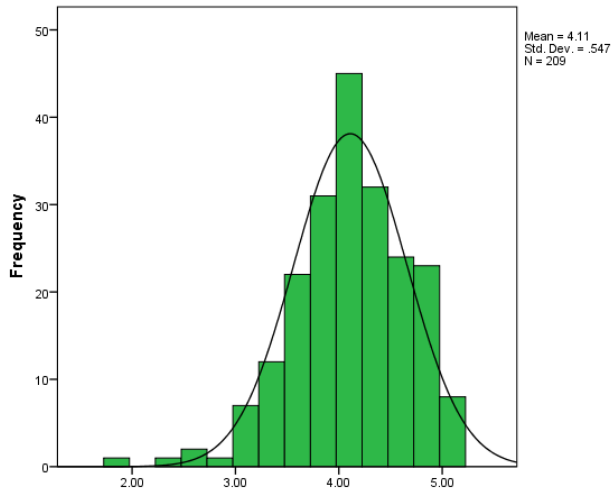
4.10.1 Figure 7: the distribution of results in the advantages of inclusion



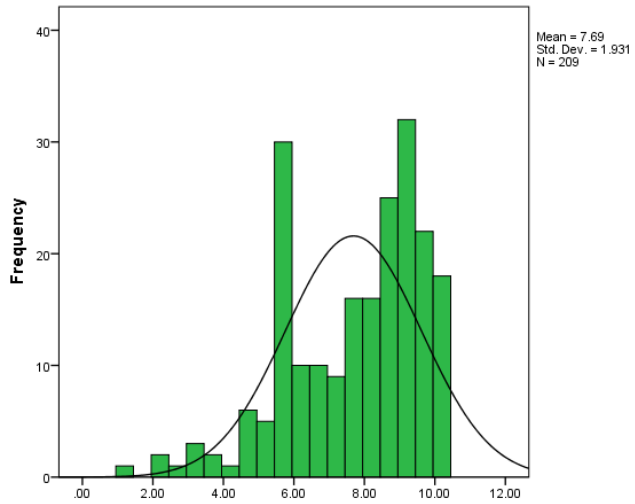
4.10.2 Figure 8: the distribution of results in the disadvantages of inclusion



4.10.3 Figure 9: the distribution of results in the barriers to inclusion



4.10.4 Figure 10: the distribution of results in the methods of improving inclusion



4.11 Inferential Statistics:

The data, based on the four dependent variables are judged to be parametric, hence parametric tests were used to explore the data. Three tests - commonly employed to evaluate the correlation of variables in quantitative studies such as this - were used here. They were: Independent samples One Way Analysis of Variance, Independent samples t-test, and Pearson's r correlation. Instructions for these tests were taken from Martin & Bridgmon (2012).

4.11.1 Independent One Way Analysis of Variance (ANOVA):

This is a parametric test that aims to test the effect of independent variables (that have three or more levels) on the dependent variables. This test allows the researcher to determine if there is a significant effect using an Alpha level of 5%. Significant effect also means that there is a significant difference between the different levels of the independent variables. Furthermore, the ANOVA test allows for measuring the difference between any two levels of the independent variables that are conducted through Post-hoc tests. The post-hoc test used here was the Bonferroni test, which also determines whether any two levels are significantly different using an alpha level of 5%. This test was conducted to measure the effect of variables such as experience, age, and education.

4.11.2 Independent samples t-test:

This is a parametric test to measure the effect of an independent variable that has two levels, on the dependent variables. The significance of the results is also determined using an alpha level of 5%. This test was used for measuring the effects of type of school, training in SEN, and Contact with SEN children outside school.

4.11.3 Pearson's r Correlation:

This test allows the researcher to measure whether or not two variables are correlated. The Pearson's correlation coefficient ranges between 0-1 or 0% to 100% either negative or positive. The significance of the correlation coefficient is determined through the alpha level which is set at 5%. Positive correlative reflects that as scores in one variable increase the scores in the other one increase, while a negative correlation coefficient reflects that as scores of one variables increases the scores in the other variable decreases. This test was conducted to determine the correlation between the four dependent variables i.e. advantages, disadvantages, barriers and methods.

4.11.1.1 Age Effect:

Participants' ages were recorded in four categories, 21-25, 26-30, 31-35 and 36 and above. An Independent One-way Analysis of Variance (ANOVA) was used to test the effect of age an independent variable on the dependent variables in the questionnaire (Advantages of inclusion, disadvantages of inclusion, barriers, and methods of improvement). The results of the ANOVA indicated that age has no effect on Advantages, $F(3,205) = 0.53$, $p = 0.66$,

Disadvantages: F (3,205) =2.02, p=0.11, Barriers: F (3,205) =0.436, p=0.72 or Methods: F (3,205) =0.193, p=0.90. (See tables 12, 13 in appendix).

4.11.1.2 Experience Effect:

An independent one-way analysis of variance (ANOVA) was used to test the effect of experience on the dependent variables. The results showed that experience had a significant effect on Advantages, F (4,204) =5.31, p=0.000, showing that participants who had 21 years or more of experience had the highest agreement with the advantages (M=4.44) followed by 16-20 years of experience (M=4.25) then 11-15 (M=4.14), 6-10 years (M=4.00) and finally 1-5 years (M=3.87). The Bonferroni post hoc test showed significant difference between the categories of 1-5 and 16-20 and >=21 and between the categories of 6-10 and >=21categories ($p<0.05$).

Furthermore, a significant effect of experience was found on participants' evaluation of the barriers facing inclusion, F (4,204) =3.57, p=0.008. Participants who had experience above 21 years (M=4.44) again showed the highest mean score, followed by participants who have 16-21 years of experience (M=4.13) then 1-5 years (M=4.36) and 6-10 (4.35) and finally 11-15 years of experience (M=3.99). Bonferroni post hoc test showed significant difference between1-5 and >=21, and between 6 -10 and >=21, and between 11-15 and >=21 ($P<0.05$).

No significant effect of experience was found on the disadvantages of inclusion F (4,204) =0.769, p=0.547 and finally no significant effect was found on the Methods for improving inclusion: F (4,204) =1.51, p=0.199. (See tables 14, 15 in Appendices)

4.11.1.3 Education Effect:

Participants' education varied between diploma, bachelors, and masters degrees. The majority of participants had bachelor's degrees (195) while seven had a master's degrees and seven had diplomas. [It should be noted that these latter numbers are rather low for conducting such as test, and while they cannot offer definitive findings nevertheless they provide a useful and interesting point of comparison with the responses of the teachers who had a BA degree.] When measuring the effect of education on the dependent variables, one-way analysis of variance showed a significant effect of education on the disadvantages of inclusion, F (2,206) =4.29, p=0.015. Participants with a diploma showed the highest mean score of agreement with of disadvantages of inclusion (M=3.75) followed by the bachelors (M=3.42) and finally the masters' degree participants (M=2.94). The Bonferroni post-hoc test showed significant difference between diploma and bachelors and between diploma and masters ($p<0.05$). No

significant effect was found for the education type on the advantages of inclusion F (2,206) =0.169, p=0.845, or the Barriers of inclusion, F (2,206) =0.82, p=0.439 or the methods of improving inclusion, F (2,206) =2.02, p=0.134. The means scores between the different education types within each of these variables seemed similar. (See tables 16, 17 in appendix)

4.11.2.1 Type of school:

Participants categorised the schools in which they worked into two lists; a unit for SEN children located within a mainstream school, or a fully inclusive school. An independent samples t-test was used to assess whether the type of school could have a significant effect on the studies' outcomes. However, the results indicated that the school types had no significant effect on Advantages, t (207) =0.930, p=0.35 or Disadvantages, t (207) =1.42, p=0.15 or Barriers, t (207) = 0.026, p=0.97 or Methods, t (207) =0.159, p=0.87. (See tables 18, 19 in appendix)

4.11.2.2 Training in methods of teaching SEN children:

Participants were asked whether or not they had received training in teaching children with SEN. The majority (174) had training in SEN and 35 had no training. Using independent samples t-test it was found that training in SEN showed a significant effect on the way participants rated the Advantages of inclusion, t (207) =2.15, p=0.032; it was found that those who had received training showed a significantly higher mean score; i.e. they showed more agreement on the 5-point agreement scale (M=4.17) compared to those who had not received training (M=3.94). On the other hand, no significant effect was found for training in regard to the Disadvantages, t (207) =1.26, p=0.20, the Barriers, t (207) =0.837, p=0.40, nor the Methods, t (207) =0.362, p=0.72. (See tables 20, 21 in appendix)

4.11.2.3 Contact with SEN children outside of the school setting:

Participants were asked to state whether or not they had contact with SEN children outside the school; 37 reported having had contact, and 172 had not. An independent samples t-test was used to see to determine if such contact had a significant effect on the research outcomes. It was evident that there was a significant effect for the contact on the Advantages of inclusion t (207) =2.00, p=0.047. Participants who had contact with SEN children showed a higher mean (M=4.31) compared to those who did not have contact (M=4.10). Furthermore, a significant effect for the contact was found on the Barriers to inclusion t (207) =6.17, p=0.000. Again, participants who had contact with SEN children outside the school rated the barriers to be higher (M=4.57) compared to those who had no experience (M=4.01). No significant effect

was found for the contact with SEN on the Disadvantages of inclusion t (207) =1.36, p=0.147 nor on the Methods, t (207) =0.257, p=0.0.79. (See tables, 22, 23 in appendix)

4.12 Correlations:

This section analyses the extent to which the dependent variables (advantages, disadvantages, barriers and methods) are correlated. To do so a Pearson's r correlation test was used. Referring to Table 24 (see Appendices), the results indicated that there is a negative correlation between participant's evaluation of the advantages and the disadvantages of inclusion r (209) =-1.36, p=0.05. This shows that the higher they evaluate the advantages the lower they are likely to evaluate the disadvantages. No significant correlation was found between the advantages and barriers: r (209) =0.052, p=0.452 or between the advantages and methods: r (209) =127, p=0.067. The disadvantages were found to be significantly and positively correlated with the barriers, r (209) =0.371, p=0.000. This reflects that the higher the participants evaluate the disadvantages the higher they will evaluate the barriers. No significant correlation was found between the disadvantages and the methods, r (209) =0.006, p=0.927, and no significant correlation was found between the barriers and methods, (209) =0.80, p=0.251.

4.13 Summary: relevance and implications for practice

At this point it is pertinent to review and summarise the main points derived from the questionnaire data. Firstly, it is evident that training and teaching experience have a direct bearing on attitudes to inclusion. While teachers identified the various difficulties associated with including SEN girls in mainstream classes, nevertheless they were generally of the view that inclusion has social benefits to some of the children – though perhaps not all, such as those with severe forms of autism or with behavioural problems. Secondly, the disadvantages and barriers to inclusion are difficult to address or surmount. The responses stated firmly that the main obstacles stem from the practicability of teaching SEN children in a mainstream setting: that is, the difficulty of giving adequate attention to SEN girls without neglecting the other children – and vice versa. Also, the difficulties associated with teaching children who have certain types of impairment/disability. A third implication concerns training. While training may not fully prepare teachers for all classroom situations it emerged that, in general, those with more training (especially for teaching SEN children) were more positive overall in their perceptions and experiences of inclusion.

4.14 Open questions: SEN teachers

Following is a summary of the results of the open-ended questions which were the final two questions in the questionnaire. The questions invited teachers to write their own comments and perceptions.

4.14.1 Section 7, Question A:

What do you believe are the advantages and disadvantages of using a special educational resource room to support inclusion?

This question resulted in participants identifying a number of advantages and advantages, which are grouped in the tables below. A number of advantages were listed by the SEN teachers for the resource room. As can be seen in the graph below, interactive learning is what makes it a unique room (mentioned by 59 teachers). They also stated that the resource room improves educational performance of SEN students (50 comments), allows for various teaching methods to be used (43 comments), and provides an easy environment in which to teach (41 comments).

4.14.1.1 Table 25: Advantages of the resource room

Interactive learning	59
Varying teaching methods	43
Advanced equipment	33
Interesting sessions	21
Easy to teach	41
Privacy	19
Improves performance	50
Positive environment	29

When enquiring about the negatives associated with the resource room, participants expressed the view that their room needs updating with newer technologies and good maintenance (mentioned by 37 participants). Furthermore, they explain that some SEN teachers

are not skilled enough to use all the facilities in the room (27 comments), or do not use it to full advantage (26 comments).

4.14.1.2 Table 26: Disadvantages of resource room

Isolates SEN students	22
Conflicts with other session	15
Distraction	13
Insufficient use	26
Teachers unskilled to use it	27
Needs updating	37
Only SEN teachers use it	16

4.14.1.3 Research Question:

Although the research questions are discussed in detail in the following chapters (chapters 5 and 6), it is appropriate here briefly to summarise these responses in relation to the question which asked about the role of the resource room within the context of a mainstream school. It was evident from all these replies that teachers regard the presence of a resource room as essential. Overall, the view was expressed that several types of impairment/disability need the close attention of specialist teachers in a special facility, teachers in mainstream rooms being unable to effectively assist SEN children while simultaneously attending to the instruction of the other students. It emerged that teachers can generally work with children who have a physical impairment but have greater difficulty teaching those with cognitive impairments or challenging behaviour in mainstream classrooms.

4.14.2 Section 7, Question B:

From your personal view, what are the differences regarding inclusion between the attitudes of special education needs teachers and mainstream teachers؟

Most SEN teachers stated that they think mainstream teachers are not well prepared to teach SEN students, and they cited a number of reasons. The responses to this question are summarised in Table 27 (below) which shows the general perception of the differences that the SEN teachers believe to exist between themselves and the mainstream educators. From the table, it can be seen that lack of awareness is the main difference. The respondents claim that mainstream school teachers lack awareness about SEN children (mentioned by 91 teachers) and are generally less positive when dealing with SEN students (80 comments). Furthermore, they claim that the mainstream teachers are less experienced (70 comments), lack sufficient classroom preparation (71 comments), and at times refuse to teach SEN students (61 comments). Inclusive classes, when taught by mainstream teachers, do not offer flexible teaching methods (55 comments). Finally, 15 teachers stated that there is no difference between SEN and mainstream teachers.

4.14.2.1 <u>Table 27</u>: Differences between SEN teachers and mainstream teachers

Less Positive	80
Less experienced	70
Lack of awareness	91
Rigid teaching methods	55
Refusal to teach SEN	61
Insufficient preparation	71
No difference	15

4.15 Part 2: Attitudes of Mainstream teachers

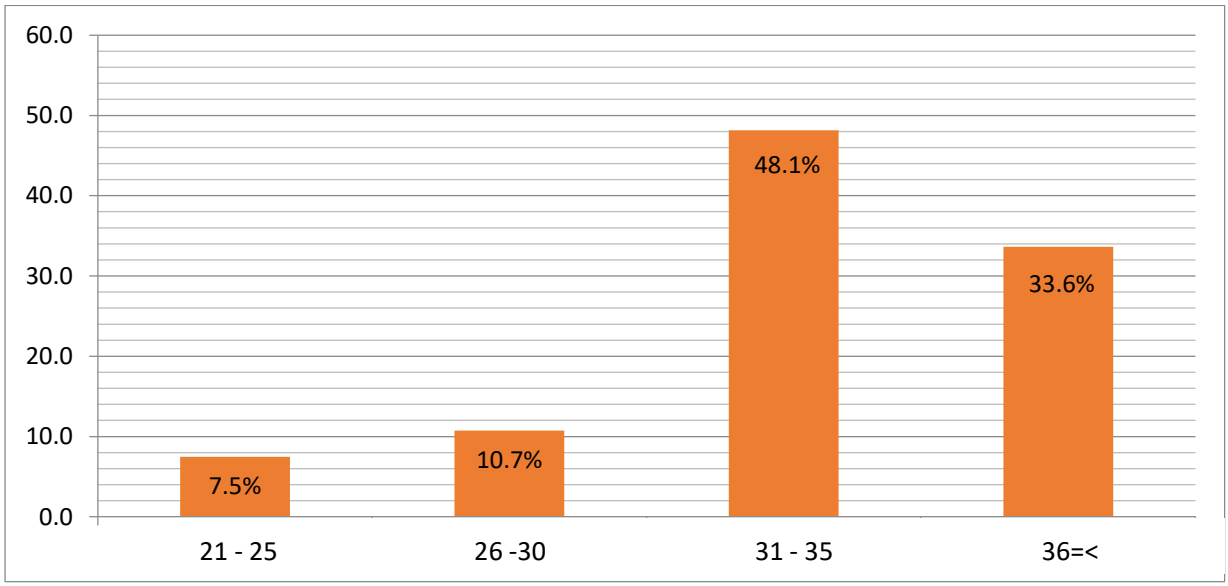
Having considered the responses of the SEN teachers, this section focuses on the responses from mainstream teachers. This part firstly introduces demographic details of this sample using frequencies and percentages, followed by descriptive analysis of the different scales. The scales represent the views about the type of placement/setting needed for children of different disabilities; the advantages and disadvantages facing SEN children within inclusive schools; the barriers; and the methods for improving inclusion (dependent variables). Following the descriptive analysis, an additional section provides the inferential statistics which will measure the effects of different demographic variables on the main dependent variables listed previously.

4.15.1 Background information:

4.15.1.1 Age effect:

214 participants took part in this study, and 209 completed the questionnaire in full. Using four age categories, the majority of participants were found to fall in the 31-35 years old category (48.1%) followed by participants in the 36-or-above category (33.6%). Only 10.7% were aged between 26 and 30, and 7.2% were aged 21-25. Figure 1 below shows the percentage of participants under each category.

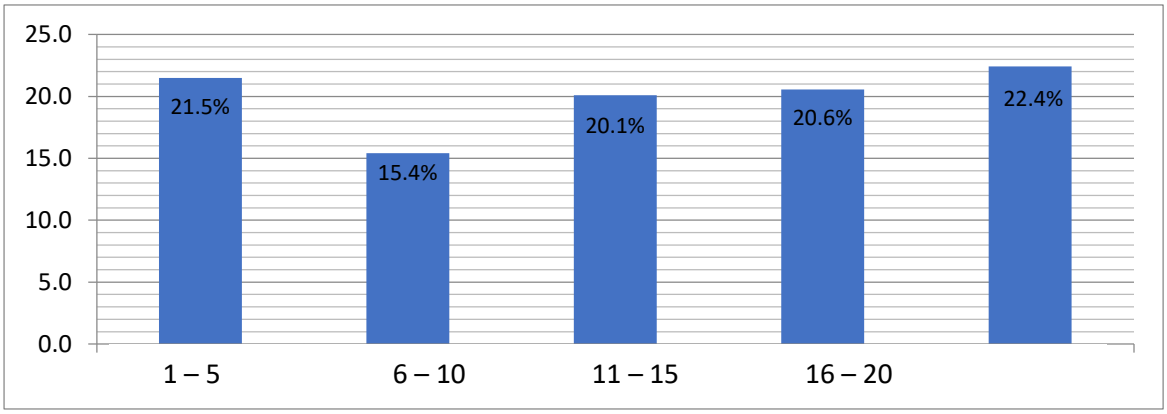
4.15.1.1.1 Figure11: participants' age in years



4.15.1.2 Experience effect:

Participants' years of experience in education were coded using five categories, and these reflected similar percentages of participants in each category. That is, 22.4% of the participants had teaching experience of 21 years or more; this was followed closely by 21.5% of participants who had 1-5 years' experience; 20.6% had 16-20 years' experience, and 20.1% had 11-15 years' experience. The lowest percentage was generated for participants in the 6-10 years category (figure 2).

4.15.1.2.1 Figure 12: participants' level of experience

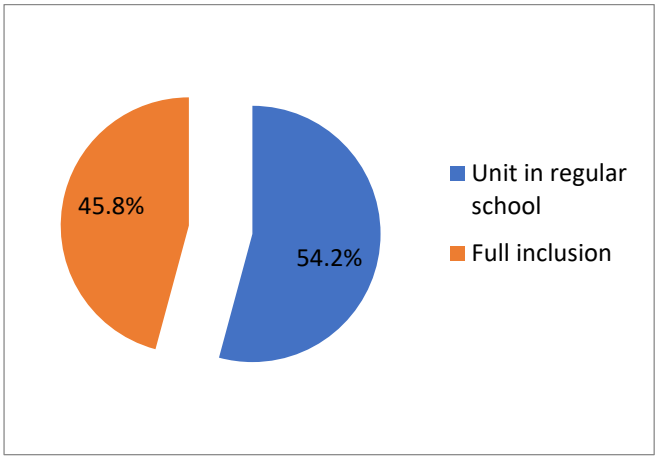


It is pertinent to note that the profiles of the teachers of SEN girls and the mainstream teachers were similar. That is, most (>80%) of the latter were aged over 30, and almost 75% of the latter had more than ten years' experience as classroom teachers. The relative maturity of the teachers and their considerable experience must contribute to the relevance and value of their comments on the issue of inclusion. That is, the comments, perceptions, and observations of older and more experienced teachers would in most circumstances carry greater weight than those of young, inexperienced teachers.

4.15.1.3 School type:

Teachers were asked to indicate the type of school in which they worked, 54.2% reporting that they work in mainstream schools that had units for SEN children, and 45.8% worked in full-inclusion schools (figure 13).

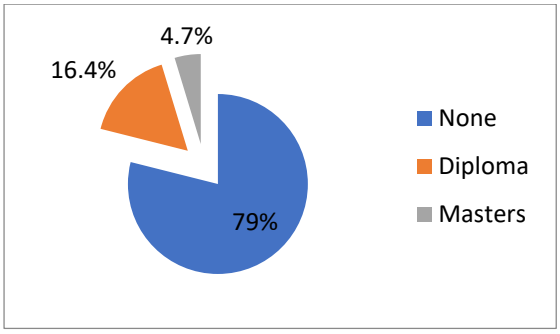
4.15.1.3.1 Figure 13: Schools' type and inclusion



4.15.1.4 Education:

Participants were asked to state the type of education/qualification they had in the field of SEN. It was found that most (79%) had no qualification; 16.4% had a diploma in education in the field of SEN, and finally 4.7% had a master's degree in SEN (figure 4). Participants with BA qualifications in SEN were excluded from this part of the analysis as they were considered to be SEN teachers, and this section is only interested in mainstream teachers. Having a diploma or a master's degree does not necessarily qualify the teacher to be an SEN teacher according to the education ministry in Saudi Arabia. Hence, they are all considered mainstream teachers unless they have a bachelor's degree in SEN.

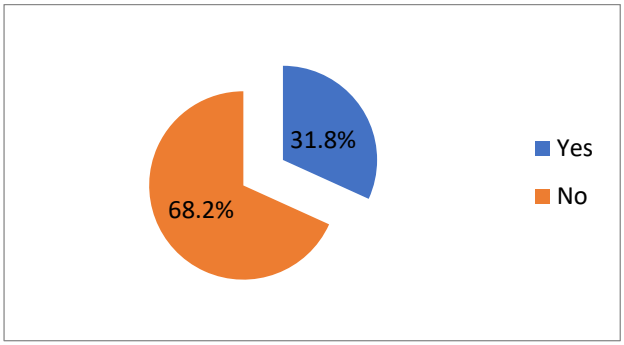
4.15.1.4.1 Figure 14: Participants' level of education



4.15.1.5 Training in SEN:

Participants were asked whether they had received training in SEN; in response, 68.2% reported that they had not received any training, while 31.8% stated that they had received some training in SEN (figure 5).

4.15.1.5.1 Figure 15: Participants' training in SEN

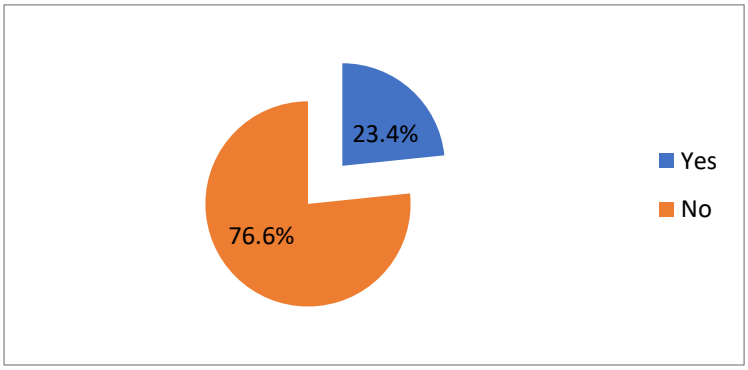


The findings of these two questions is especially important because it shows a considerable gap in the respective levels of professional training of the two groups of teachers. In particular it reveals that most mainstream teachers had received little or no training for mainstream teaching or for teaching SEN children. This apparent lack of suitable training would, no doubt, reduce the ability of the mainstream teachers to address the specific learning difficulties experienced by the SEN girls. Moreover, if many of the mainstream teachers were ill-prepared to work with SEN girls then this would negatively influence the teachers' views of inclusion.

4.15.1.6 Contact time with SEN children outside of work:

Most (76.6%) participants had no contact with SEN children outside their work; 23.4% did have contact with SEN children outside school (see figure 16). The relevance of this is that familiarity with special-needs children in settings other than at school may influence positively the teachers' confidence when dealing with the SEN girls in class. That is, the teachers may acquire interpersonal and communication skills which could be transplanted for use in the classroom. Similarly, the teachers might acquire greater understanding of children who have different learning needs.

4.15.1.6.1 Figure 16: participants' contact with SEN children outside school



4.16 Perceptions about placement:

In this part participants were asked their opinion about the most appropriate setting or environment for teaching girls with SEN; to do this they were asked to list settings according to a number of SEN disabilities. The results of this question are summarised in Table 28 (see Appendices). Seven categories of special needs were used (Visual impairment, Hearing impairment, Physical Disability, Intellectual Disability, Challenging Behaviour, Learning Difficulties and Autism). Six optional settings were suggested; Home, Residential Care, Special School, Special Class in Mainstream School, Inclusion and Out-class support, Inclusion and In-class Support.

For visual impairment, it appears that most teachers prefer children to be placed in special schools (48.1%), followed by a special class within a MS school (15.9%); residential care (13.6%); in inclusion and in-class support (10.7%), and 7.9% thought inclusion and out-class support was best suited. Only 3.7% thought home was the preferred setting. For hearing impairment, participants again explained that a special school is the best setting (47.2%) followed by a special class in a MS (17.3%), inclusion and in-class support (11.2%); 10.3% supported residential care, 9.8% selected inclusion and out-class support, and finally 4.2% selected home setting.

In regard to physical disabilities, 35.5% of participants stated that the children should be placed in special schools; 23.4% thought residential care was the best setting; 17.8% selected inclusion and in-class support, 11.2% selected special class in MS, and 9.3% selected inclusion and out-class support. Finally, only 2.8% selected the home setting. As for children with intellectual disabilities, 38.8% of participants thought that special schools were best suited, followed by residential care (36.4%), special class in MS (11.2%); 5.6% selected a home setting while 4.7% selected inclusion and in-class support. Only 3.3% selected inclusion and out-class support.

For children with challenging behaviour, participants selected special schools (39.7%) followed by residential care (27.1%), special class in MS (9.8%), and inclusion and in-class support (8.4%). Inclusion and out-class support was recommended by 7.9%, while 7% favoured home setting. According to the participants, children with learning difficulties should be placed in special schools (43.5%); followed by special class in MS (15.4%), and inclusion and out-class support (15.4%); 11.2% opted for inclusion and in-class support, 9.8% selected residential care, and 4.7% selected home settings. Finally, for autistic children, 38.8% of

participants selected special schools as the preferred setting; 28.5% thought residential care was best; 14.5% selected special class in MS. 7.9% were in favour of inclusion and in-class support, 6.1% selected inclusion and out-class support, and finally 4.2% chose home setting. Overall, participants here favoured special schools for all disabilities, this was followed by residential care, while home setting received the least selection in all types of disabilities, see table 1 for more details.

4.17 Relevance to Research Question:

The data derived from the questionnaire replies from the mainstream teachers show that they strongly favour the use of, firstly, a segregated special school (for some children at least), secondly, a resource room located within the school setting, and thirdly, in-class support from a specialist teacher. As already noted, while many express support for the general concept of inclusion they clearly have strong reservations about the practicalities of teaching SEN girls within a mainstream class. Considered overall, they state that other settings and other approaches to instruction are preferable to having the girls taught solely by a mainstream teacher in a mainstream class. In short, many (perhaps most) mainstream teachers would probably prefer to not have SEN children in their classes – and this is contrary to the whole notion of inclusion. This issue is considered in more detail in the following discussion chapter.

4.17.1 Teachers' views: advantages

In the questionnaire, the advantages of inclusion to SEN children were represented in 14 statements which were answered on a 5-point Likert scale. Table 29 (see Appendices) summarises the teachers' answers descriptively, and by reviewing the mean scores and the ranking it was evident that the highest average of agreement was found for the statement "A good approach to managing inclusive classrooms is to have a special education teacher be responsible for instructing the girls with special needs" (M=4.47). The statement receiving the next level of support (M=4.12) was, "Typically developing girls in inclusive classrooms are more likely to exhibit challenging behaviours learned from girls with special needs". Thirdly, it was found that there was high agreement (M=3.96) for the statement "Inclusion is socially advantageous for girls with special needs". At the other end of the scale, the lowest ranked statement, based on mean scores of agreement, were "Girls with special needs in inclusive classrooms develop a better self-concept than in a self-contained classroom" (M=3.54), then "The challenge of a mainstream education classroom promotes academic growth among girls with exceptional education needs" M=(3.46), and finally the advantage that "Girls with special

needs have the right to be educated in the same classroom as typically developing girls" (M=3.33). Overall, there were more percentages of agreement (agree and strongly agree) in regard to the advantages of inclusion as compared to the points of disagreement. This indicates that all items were considered as advantages, but some more than others.

4.17.2 Teacher Views: Disadvantages

The disadvantages of inclusion were represented in 10 statements that were measured on 5-point Likert scales. Using descriptive statistics (see Table 30 in Appendices), it was found that the highest agreement was generated for the statement "The individual needs of girls with disabilities CANNOT be addressed adequately by a mainstream education teacher" (M=4.30), followed by "The behaviours of girls with special needs require significantly more teacher-directed attention than those of typically developing girls" (M=3.69) and thirdly "Girls with special educational needs monopolize teachers' time" (M= 3.75). The least agreement was for the following disadvantages: "Most special education teachers lack an appropriate knowledge base to educate typically developing girls effectively" (M=3.36); then "Inclusion is not a desirable practice for educating most typically developing girls" (M=3.21). Finally, the lowest level of agreement was for the disadvantage depicting that "Isolation in a special class does not have a negative effect on the social and emotional development of girls prior to middle school" (M=2.92).

4.18 Preparedness to implement inclusion:

Participants were asked to describe their preparedness to implement inclusion according to disability type (4-point scale) with the seven types of disability. Referring to Table 31 (below), analysis of the data shows that preparedness seems to be mixed across disabilities. By looking at the Not Prepared answers it can be seen that Intellectual Disabilities (43.5%) received the highest percentages of participants being unprepared; this was followed by Autism (40.2.5%), and challenging behaviour (32.2%).

4.18.1 Table 31: participants' preparedness to implement inclusion based on disability

	Extremely prepared	**Very prepared**	**Somewhat prepared**	**Not prepared**
Visual impairment	22. %	26.6%	23.4%	28. %
Hearing impairment	22.9%	27.6%	20.1%	29.4%
Physical	25.2%	29. %	24.8%	21. %
Intellectual disability	11.7%	13.1%	31.8%	43.5%
Challenging behaviour	10.7%	19.6%	37.4%	32.2%
Learning difficulties	35.5%	22.4%	21.5%	20.6%
Autism	12.1%	18.7%	29.%	40.2%

4.19 Barriers to inclusion:

Barriers to SEN children being fully included were represented in 20 items. Participants were asked to indicate their agreement (5-points) with these barriers based on their experience. The descriptive statistics (see Appendices Table 32) show considerable agreement in regard to all barriers. The barriers to inclusion which were ranked highest were "Classrooms do not accommodate girls with disabilities", and "Lack of equipment and appropriate educational materials", both of which received the same mean (M=4.64). The barrier ranked next was "Lack of experience regarding Inclusion" (M=4.63), and then "Little Knowledge about special educational needs" (M=4.57). The lowest ranked items were "Non-acceptance by other parents" (M=3.64), "Inadequate in-service training for teachers" (M=3.61), and the least agreement was for the barrier "Non-acceptance by parents of SEN girls" (M=3.35). By looking at the frequencies and the means of all items, it can be concluded that there is general agreement on all barriers.

4.20 Methods for improving inclusive practices:

The participants were presented with 10 optional methods that could improve inclusive practices in schools, the options being derived from the literature on previous research (see Literature Review, Chapter2) These methods/items were scored on a 10-point scale ranging from 1 (least important) to 10 (most important). Table 33 (see Appendices) presents the frequency and the percentages of the responses. The mean was calculated to give an indication of the methods considered by the participants to improve inclusive practices. Analysis of the mean scores across all methods shows "Direct teaching experience with girls with disabilities"

received the highest expression of support (M=8.13), followed by "Observation of other teachers in inclusive settings" and "In-service training/workshops" which generated the same mean score (M=7.85). The next method was "Consultation activities with other teachers, specialists and parents" (M=7.78). The least important methods were found to be "Exposure to girls with disabilities" (M=7.35) followed by "Independent reading" (M=7.34). And finally, the "Research involvement" (M=7.22). By looking at all methods of improving inclusive education it can be concluded that they are all considered to be important; that is, they all generated a high mean score of at least M=7.22.

4.21 Research Question 3:

Although discussed in detail in the following chapter (see Discussion), in the light of these responses by the teachers it is appropriate here to briefly consider how they help answer the research questions concerning inclusive practices. It is evident that participants view training as the key. The training could take a number of forms, but acquiring skills and competencies by learning from more experienced teachers was the favoured approach. Training might be in formalised settings such as in-service workshops or structured courses, but it could also be less formal by way of observations. Either way, it was suggested that on-going experience in working with SEN children will yield greater skills, confidence, and proficiencies - and hence elevate the process of inclusion.

4.22 Scale reliability:

Similar to the tests for reliability of the teachers' questionnaire, tests were conducted to see whether the different scales were reliable for the responses of the mainstream teachers. All scales were measured either on a 5-point Likert scale (three separate scales being used) or a 10-point scale (1 scale). In order to measure the consistency between answers within each scale a Cronbach's alpha reliability test was conducted for the advantages of inclusion, disadvantages of inclusion, barriers to inclusion, and methods for improving inclusion. All scales reflected good and high reliability; the least was for the disadvantages of inclusion (70.3%) and the highest was generated for methods of improving inclusion (94.5%). The advantages of inclusion had a reliability of 91.9% and the barriers to inclusion showed 86.6% reliability (see tables 34-37)

4.22.1 Tale 34: Advantages of inclusion

Reliability Statistics

Cronbach's Alpha	N of Items
.919	14

4.22.2 Table 35: Disadvantages of inclusion

Reliability Statistics

Cronbach's Alpha	N of Items
.703	10

4.22.3 Table 36: Barriers to inclusion

Reliability Statistics

Cronbach's Alpha	N of Items
.866	20

4.22.4 Table 37: Methods for improving inclusive practices

Reliability Statistics

Cronbach's Alpha	N of Items
.945	10

4.23 Computing variables and descriptive statistics:

The questionnaire included four main scales for measuring the advantages of SEN inclusion, disadvantages of SEN inclusion, barriers to inclusion, and methods for improving inclusive practices. The first three scales were measured on a 5-point Likert scale and the last followed a 10-point importance scale. Since all scales were highly reliable they were computed so that each is represented in one overall average variable. The average was created by summing all variables within each scale divided by the total number of items. This resulted in the following variables, as presented in Table 38. Descriptive statistics were calculated to assess the distribution of participants' scores.

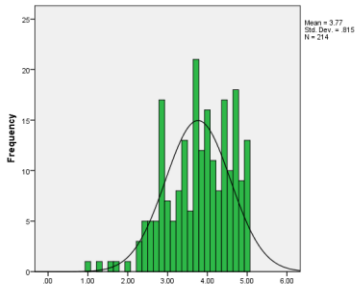
4.23.1 Table 38: Descriptive statistics for each of the four dependent variables

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Advantages	214	1.00	5.00	3.7660	.81530	-.570	.166	-.036	.331
Disadvantages	214	1.00	5.00	3.6093	.63357	-.468	.166	.819	.331
Barriers	214	1.00	5.00	4.2117	.51437	-1.441	.166	1.084	.331
Methods	214	1.00	10.00	7.5972	2.36619	-1.141	.166	.477	.331

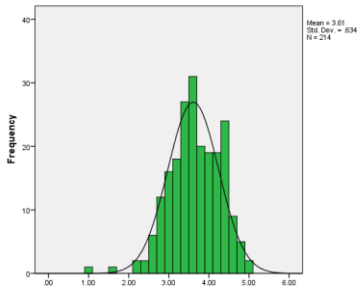
4.24 Data examination:

Following the computing procedure of the scales, it is important to assess the type of data in hand so as to be able to select suitable tests for the inferential statistics. The data need to be judged as either parametric or non-parametric based on which tests were to be selected. As explained previously, for data to be parametric they have to be of an interval level of measurement and they have to be normally distributed around the mean. The measurements in all scales were considered by interval, and by looking at the table above and the graphs the data can be judged to be normally distributed as far as the four overall variables are concerned. The values within each of the dependents were found to be around the mean score, with few extreme scores in Bell-shaped histograms. Furthermore, the Skewness and the Kurtosis statistics showed values between +2 and -2, which is a reflection of normal distribution (see figures 34-37). Therefore, the data were judged to be parametric which requires parametric inferential statistical tests.

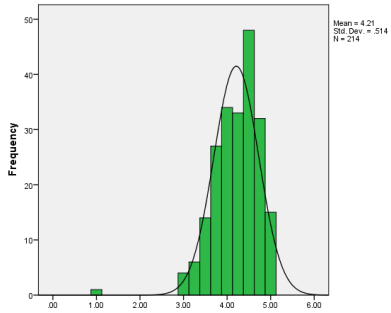
4.24.1 Figure 16: the distribution of results in the advantages of inclusion



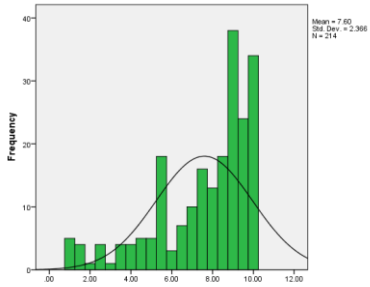
4.24.2 Figure 17: the distribution of results in the disadvantages of inclusion



4.24.3 Figure 18: the distribution of results in the barriers to inclusion



4.24.4 Figure 19: the distribution of results in the methods of improving inclusion



4.25 Inferential Statistics:

Similar to the first questionnaire, the current one was investigated using the same statistical techniques to measure the effect of demographic variables on the main dependent variables. The three tests used to evaluate these data were: Independent samples One Way Analysis of Variance, Independent samples t-test, and Pearson's r correlation.

4.25.1 Age Effect:

An ANOVA test was used to check if age had a significant effect on the dependent variables (Advantages of inclusion, disadvantages of inclusion, barriers, and methods of improvement). The results showed that age has a significant effect on the Advantages of inclusion, $F(3,210) = 3.47$, $p = 0.017$, and using the Bonferroni post-hoc test the significant difference was found to be between the 26-30 age group and the 31-35 group ($p < 0.05$). Furthermore, age was not found to have a significant effect on the disadvantages: $F(3,210) = 2.34$, $p = 0.074$, the barriers: $F(3,210) = 0.47$, $p = 0.703$ or the methods: $F(3,210) = 1.197$, $p = 0.312$. (See tables 39, 40 in appendices)

4.25.2 Experience effect:

An ANOVA test was used to examine the effects of experience on the dependent variables; experience was in five categories, 1-5 years, 6-10, 11-15, 16-21 and 21 years and above. (See tables 41, 42 in Appendices). Experience was found to have a significant effect on Advantages, $F(4,209) = 5.35$, $p = 0.000$, showing that participants who had 1-5 years' experience ($M = 4.05$) generated the highest agreement, followed by 6-10 years of experience ($M = 4.04$), then 16-21 ($M = 3.72$), 21 or above ($M = 3.66$) and finally 11-15 ($M = 3.39$), 16-21 years ($M = 4.00$) and then 1-5 years ($M = 3.87$). The Bonferroni post hoc test showed a significant difference between categories 1-5 and 11-15, and also between 6-10 and 11-15 years of experience ($p < 0.05$).

4.25.3 Educational effect:

An ANOVA test showed as significant effect in regard to participants' own education and their comments on the advantages of inclusion $F(3,210) = 5.17$, $p = 0.006$; participants with a master's qualification showed the highest mean score ($M = 4.18$) followed by those with diplomas ($M = 4.08$), and finally those with no qualification in SEN ($M = 3.76$). The Bonferroni post hoc test showed significant differences between those with no education in SEN and those

with diplomas and with masters ($p<0.05$). A significant effect of education was also found on the disadvantages of inclusion, $F(3,210) = 4.76$, $p=0.009$. Participants with no qualification in SEN showed the highest score ($M=3.67$) followed by those with masters ($M=3.31$, BA ($M=3.36$), and finally diplomas ($M=3.36$). The Bonferroni post-hoc test showed significant differences between participants with no qualification in SEN and those with diplomas and masters ($p<0.05$). Furthermore, it was shown that education had a significant effect on Methods of Improving SEN, $F(3,210) = 4.53$, $p=0.012$. The highest mean was generated for those with diplomas ($M=8.56$) followed by masters ($M=7.59$), and finally those with no qualification in SEN ($M=7.35$). A significant difference was found between those with no qualification and those with diplomas ($p<0.05$). No significant effect of education was noted in regard to the barriers, $F(3,210) = 0.48$, $p=0.618$. (See tables 43, 44 in Appendices)

4.25.4 Type of school:

Schools attended by the participants were in two categories: a specialist unit (for SEN children) within a mainstream school, and a full-inclusion school. In this questionnaire, the researcher was only interested in those who had not completed either a bachelor's degree or a master's degree SEN. Independent samples t-tests were used to determine the effect of school type on the dependent variables. No significant effect was found for the Advantages $t(212) = 1.46$, $p>0.05$; Disadvantages $t(212) = 0.90$, $p>0.05$; Barriers $t(212) = 0.22$, $p>0.05$, or methods, $t(212) = 0.10$, $p>0.05$. (See tables 45, 46 in appendices)

4.25.5 Training in SEN:

Participants' experience with teaching special needs children was assessed in terms of effect on the main dependent variables. (The responses are summarised in tables 47, 48 in appendices). Using independent samples t-tests it was found that training in SEN had a significant effect on the way participants rated the Advantages of inclusion, $t(212) = 4.34$, $p=0.000$; it was also noted that those who had training showed a significantly higher mean score ($M=4.07$) compared to those who did not have training ($M=3.62$). A significant effect was found in regard to the Disadvantages: $t(212) = 3.50$, $p=0.001$; participants with no training showed a higher mean score ($M=3.71$) compared to those who had training in SEN ($M=3.39$). No significant effect was found for experience in respect to Barriers, $t(212) = 0.054$, $p=0.590$, nor to the Methods for improving inclusive practice: $t(212) = 0.63$, $p=0.52$.

4.25.6 Contact with SEN children outside of school hours:

An independent samples t-test was used to examine if contact with SEN children outside the school had an effect on their answers. A significant effect for the contact was found in regard to the Advantages of Inclusion t (212) =2.21, p=0.028. Participants who had contact with SEN children showed a higher mean (M=3.98) compared to those who did not have contact (M=3.69). No significant effect was found in respect of the Disadvantages of Inclusion, t (212) =-0.017, p=0.986; Barriers to Inclusion t (212) =0.77, p=0.437, or Methods for improving inclusive practices t (212) =0.678, p=0.499. (See tables 49, 50 in appendices)

4.26 Correlations:

In this section a Pearson's r correlation coefficient was conducted to test the correlation between all four variables (advantages, disadvantages, barriers and methods). The results (see Table 51 in Appendices) showed that there is a negative and significant correlation between participants' evaluation of the advantages and the disadvantages of inclusion r (214) =-0.348, p=0.000. This explains that a high agreement with the advantages is associated with participants expressing a lower agreement with the disadvantages. No significant correlation was found between the advantages of inclusion and the barriers, r (214) =-0.094, p=0.173; and there was not a significant correlation between the advantages of inclusion and the methods for improving inclusion: r (214) =0.088, p=0.200. A significant correlation was found between the disadvantages and the barriers, r (214) =0.386, p=0.000. The higher the participants evaluate the disadvantages of inclusion the higher they evaluate the barriers to inclusion. No significant correlation was found between the disadvantages of inclusion and the methods for improving inclusion r (214) =-0.008, p=0.906; neither was there any significant correlation between the barriers and methods, (209) =-0.039, p=0.571.

4.27 Differences between the two samples:

SEN teachers versus mainstream teachers

Using the four main dependent variables this part investigates the differences between the two sample groups. The results of the Independent samples t-test (See tables 52, 53 in Appendices) showed that there is a significant difference between the groups when considering the advantages of inclusion. SEN teachers showed significantly higher agreement with the advantages (M=4.13) compared to group B (mainstreams teachers) (M=3.76), t (421) =5.38, p=0.000. Furthermore, a significant difference was also found when measuring for the disadvantages of inclusion; mainstream teachers showed more agreement with the

disadvantages of inclusion (M=3.60) compared to SEN teachers (M=3.41), t (421) =3.35, p=0.001. No significant difference was found between the two groups when considering barriers, t (421) =1.95, p=0.051, or methods of improving inclusive practices, t (421) =0.43, p=0.65.

4.28 Open questions: mainstream teachers

4.28.1 Section 7 Question A:

What are the advantages and disadvantages of using a special educational resource room to support inclusion?

Mainstream teachers identified a number of advantages and disadvantages to the resource room. As for the advantages, they stated that the resource room allows SEN students to be assisted by means of more intensive learning (mentioned by 68 teachers). It was further explained that the resource room provides one-to-one time with the SEN teacher (commented by 62) while also helping with the integration of the SEN students more fully into the whole school (commented by 52). Others stated that the resource room gives an alternative environment (commented by 41) which is relaxed and easy for SEN students, thus leading to better social skills among SEN students (commented by 8).

4.28.1.1 Table 54: Advantages of resource room

Offers intensive focused learning	68
Helps integrate SEN students	52
Provides an alternative environment	41
Provides better teacher-student time	62
Improves social skills	38

Six disadvantages arose with regard to the use of a resource room. Participants claimed that sessions in the resource room often conflicted with other classes, and hence absence from the mainstream classroom led to some SEN children falling behind in some subjects (commented by 59 teachers). Others stated that there is a need for more resource rooms (44 comments) to deal with this issue. Forty-one stated that resource room are not used sufficiently by the teachers.

4.28.1.2 Table 55: Disadvantages of resource room

Not used sufficiently	41
Only used by SEN teachers	38
Conflicts with other sessions	59
Isolates SEN students	28
Not different to mainstream classroom	37
Need more resource rooms	44

4.29 Relevance to research questions:

Turning again to the research questions, the responses provided by the mainstream teachers differ from those of the specialist teachers of SEN children insofar as they show the extent to which they regard the resource room as essential. It is apparent that they regard the resource room as a necessary alternative, a place where children can be taught if they are found to be incompatible in mainstream classes. While acknowledging that the resource room is a reversion to a form of segregation with many of the negative effects of isolation, nevertheless they perceive it to be beneficial to some SEN children because the specialist teachers can provide intensive on-on-one assistance. In short, while it has disadvantages it can be a better educational environment, at least for some children who may not receive the help they need in a mainstream class.

4.28.2 Section 7 Question B:

From your personal view, what are the differences between the attitudes of special education teachers and mainstream teachers؟

In reference to the respective attitudes of the two groups of teachers, the mainstream teachers stated that the SEN teachers were more appropriately specialised to deal with SEN students (mentioned by 62 teachers), and that the SEN teachers displayed deeper understanding and more positive support when dealing with SEN students (58 comments). Others claimed that SEN teachers did not cooperate enough with other teachers (35 comments). Furthermore, the mainstream participants stated that there was a shortage of SEN teachers (29 comments), and finally 23 reported that SEN teachers did not teach enough sessions and made less contribution.

4.28.2.1 Table 56: Differences between mainstream and SEN teachers

More specialised	62
More understanding and positive support	58
SEN teachers did not cooperate with others	35
Shortage of SEN teachers	29
Did not teach many session	23

4. Qualitative Analysis

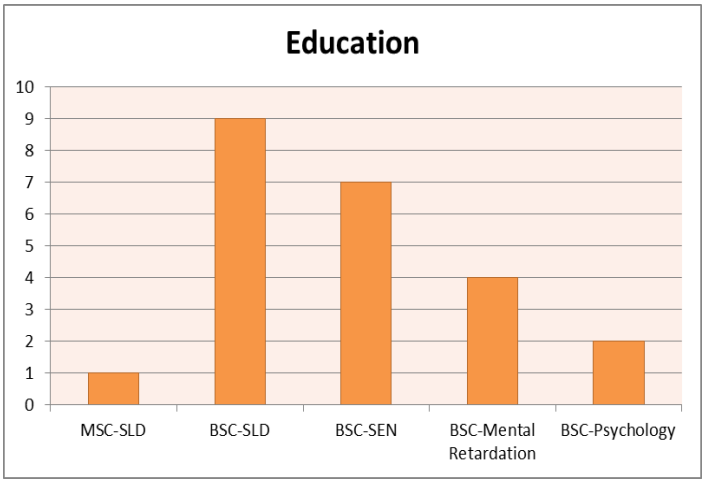
This section analyses the qualitative data generated from the interviews conducted with 23 specialist SEN teachers who had been recruited from across 50 schools in Riyadh (See Methodology). The interviews were transcribed after the interviews and then translated from Arabic to English. The data were then analysed using Thematic Analysis in order to identify the main issues which would help answer the research questions.

4.1 General Information

4.1.1 Educational background:

All interviewees were asked to provide information about their educational background and experience. The teachers' own education was essential because it can indicate possible background factors influencing their attitudes towards inclusion. The participants' backgrounds varied, but the majority had acquired a BSc degree in Special Learning Difficulties (n=9) while seven had obtained a BSc in Special Education Needs. Others had qualifications such as BSc in Mental Health (n=4), Psychology (n=2) and MSc in Special learning difficulties (n=1). These are illustrated in

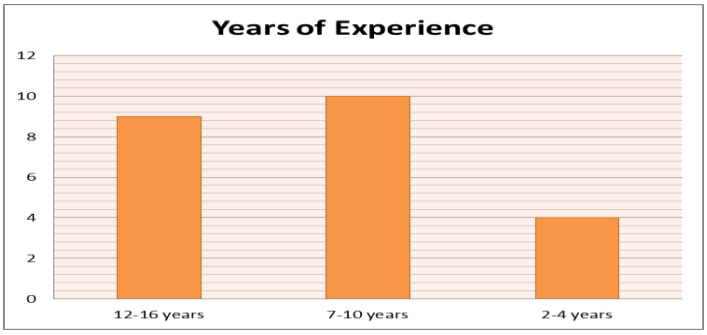
4.1.1.1 Figure 19 below:



4.1.2 Years of teaching experience:

Teaching experience, too, is considered a determinant of attitudes. The supervisors were found to be very experienced. The majority (10) had experience ranging from 7-10 years, and 9 had experience between 12-16 years. Four participants had 2-4 years of experience. This can be viewed in

4.1.2.1 Figure 20 below:



It can be seen that most (about 90%) were very experienced, most having more than seven years' experience in classrooms.

4.1.3 Participating in Training Conferences:

Participants were asked to state whether or not they have participated in SEN training conferences in Saudi Arabia or abroad. Thirteen stated that they had attended conferences on various related topics, and three had participated in an educational equipment exhibition which formed part of an international conference of learning disabilities. Also, two specialists participated in international special education conferences, and another two participated in workshops exploring how to deal with cases of autism. One specialist had organised a workshop on methods of teaching children with learning disabilities. A specialist participated in a course on the topic of educational stories for learning disabilities, another attending a conference for unifying Braille writing. A specialist participated in a conference for support services for the special education, the subject of that function being the reality and the dream for autism. Finally, 10 specialists had not participated in any conferences. Conference attendance alone is not a measure of skills acquisition, but it does indicate motivation by active SEN specialists to enhance their professional competence.

4.1.4 Attended training courses or lectures:

Another interview question asked whether SEN specialists had attended any training functions concerning special needs. Twenty reported having attended in-service training courses or lectures and only three answered in the negative. When explaining their reasons for attending such training most (18) stated that this is a specification/requirement of their employment. For example, Specialist Reem had participated in awareness training for the parents of girls with learning disabilities because:

"I am specialised in this area and it is a requirement for me to attend training development courses or lectures to enhance my knowledge and also to keep myself updated with new practices in the field of special education for children with learning disabilities".

Four stated that they had attended training courses on a voluntary basis because they were keen to learn regardless of whether or not it was an employment specification. For example, Specialist Maram, had completed fieldwork training and had given lectures on aspects of special education, but she stated that she trains others and attends training because she loves her job not because she is obliged to do so:

"It is important that I enjoy what I am doing. I really love my job and working with SEN children. I take every opportunity to learn and it is nothing to do with my job. I think as a trainer I encourage female SEN specialists to enjoy training and attend it for the love of knowledge not just to tick and satisfy their job requirements".

Overall it was clear that all specialists who attended training had done so in fields relating to their speciality.

4.2 The mainstream classroom and the resource room within the mainstream school:

The research questions asked participants about the role and function of resource rooms located within the precincts of mainstream schools. The following sections analyse the data and information provided during the interviews.

The 23 specialist participants agreed that it is the mainstream teachers who set the educational plan and determine the teaching groups for all the mainstream students regardless of individual needs. This is rather different from the approach which is followed in the resource room. By reviewing all answers, the following themes emerged:

4.2.1 Resource room:

4.2.1.1 Educational Room:

The resource room is staffed by teachers who have trained and specialised in working with children who have special needs. Twelve of the 23 SEN specialists agreed that the distinguishing feature of the resource room, as compared to the inclusive mainstream classroom, is that it is an educational room primarily for children with cognitive impairments or with other types of disability that might inhibit their learning in a mainstream room. Such groups are formed based on their types of disability and age. Specialist Mona stated that:

"*The resource rooms in the primary mainstream educational schools are conducted in order to teach the SEN students according to their particular academic needs. This is in compliance with the child's individualised educational plan which is set by the learning disabilities teacher with the help of other specialists. Each plan is structured according to the academic disabilities which the mainstream classroom teacher identifies and according to the challenges in dealing with the student with the learning disability*".

4.2.1.2 Educational equipment:

Eleven of the interviewees stated that one of the distinguishing features of the resource room is the availability of educational equipment. The instructional aides are used by the teacher according to the needs of the students. Specialist Amal said that:

"*The resource room has a lot of educational tools and equipment that facilitates learning. We should take into consideration the psychological and social aspects when helping teach disabled students both inside the resource classroom, in the inclusive mainstream classroom, and during the break or the summer activities. Use of the facilities is always determined by the teacher based on the particular needs the student*".

4.2.1.3 Depending on teachers' ability:

Three interviewees stressed that the value and usefulness of the resource room was dependent on the teachers' ability to use the facilities. Specialist Norah stated:

"We have resources in this room suitable for different needs but it is crucial that the teacher knows how to use them. If not, then the resource room is no different to any other room".

4.2.2 Inclusion mainstream classroom:

When reviewing the function of the resource room in relation to the mainstream rooms, 20 of the specialists emphasized that both psychological and social factors are important

because the SEN students can be positively and negatively affected outside the resource room. In the inclusive mainstream classes, the SEN students are more motivated because it promotes better interaction among the students and encourages participation, competition, and the friendship among them all regardless of disability.

4.2.2.1 Positive environment:

six of the specialists explained that the inclusive mainstream room is a positive environment for SEN students, that being its main benefit. For example, Dalal stated

"I would say that the inclusive mainstream room is where all children should learn. It promotes equality, personal development, and interactive skills. Children with disabilities feel like they are no different from others and that is what make the inclusive mainstream room beneficial"

4.2.2.2 Peer effect:

It was highlighted by 7 interviewees that inclusive mainstream settings can also have a negative impact on some SEN students who may be subjected to different forms of bullying and exclusion from their peer's due to their disabilities. Specialist Sarah stated that:

"*They have found out that the students with learning debilities are exposed to painful offences and annoyances from their colleagues in the inclusive classrooms, and outside it too*".

In addition, specialist Sarah stated that:

"*Their attendance in the resource room can badly affect their psychological wellbeing because attending the resource room doesn't allow them full integration with the other students and makes them feel like they are in need of extra tuition, and that makes them feel different from others. Consequently, they became more introverted and solitary, their friendships diminish inside and outside the mainstream classrooms*".

4.2.2.3 Teachers' use of aids:

Three participants commented that in the inclusive mainstream rooms the teachers do not use sufficient instructional aids and materials to meet all the educational needs of the class, hence the SEN students often fall behind in their studies. Specialist Rabab explained:

"*The inclusive rooms are good but unfortunately not all the facilities are utilised enough to meet all educational needs; teachers tend to forget about SEN students and fail to give them enough time*"

4.2.2.4 Lack of use of innovative equipment:

It was argued by two interviewees that the inclusive mainstream rooms do not allow for full innovative use of educational equipment. Specialist Nora stated that,

"*Innovative equipment is less used in the mainstream classroom and the traditional educational equipment is much more common - like the blackboard*".

Furthermore, specialist Arwa said that

"The mental age of some SEN students is lower than their colleagues in the mainstream classes despite their closeness in chronological age. Thus, innovative equipment and tools cannot be applied to them in the same way as others".

4.2.2.5 Revising Educational plans:

When discussing the advantages and disadvantages of both resource rooms and inclusive mainstream rooms, 11 of interviewees emphasized that despite all the advantages of the resource rooms there was a dire need for developing and renewing the educational plans and the teaching methods suitable for SEN children. For example, specialist Hoda stated that:

"*Before implementing inclusion into mainstream schools, we need to spread awareness to all the participants in the educational process of the special needs, requirements, and rights of the children and of our responsibilities towards them. Educational plans need to be looked at in detail to make sure that both the resource rooms and the mainstream rooms are used to the benefit of students*".

It was further stressed by Reem that there is a need for frequent training and updating when it comes to teaching SEN students.

"There should be a clear guideline of how to fully operate and teach in inclusive mainstream class rooms and resource rooms. Training and planning are required so that SEN teachers are continually encouraged and motivated to teach students with different learning abilities. This comes from above, the school and maybe the Education Ministry should encourage the revision of SEN instruction."

4.3 Differences between mainstream classrooms and resource rooms:

Specialists were asked to state the difference between mainstream classrooms and the resource rooms located within mainstream schools. The answers of the 23 interviewees were similar, and the following themes and issues emerged.

4.3.1 No focus on individual differences:

20 participants stated that in the mainstream classrooms the individual differences of the girls are not taken into consideration. For example, specialist supervisor Norah stated that:

"*The mainstream education teacher sets the collective plan for all the students and her focus will be upon the subject more than the individual differences and needs of the students".*

However, when describing the resource room the same participants stated that it is an exclusive room for SEN students and that this is used for those who have cognitive impairments and learning disabilities. The resource room focuses on enhancing SEN students learning abilities to compensate for any differences in education that exist between them and other students. Sarah said that:

"*In the resource room, the focus will be on teaching the individual girls the skills she needs. The teacher must recognize the girl's individual differences and identify her weaknesses. By setting a strategy for treating the specific needs of the student the teacher can strengthen her abilities*".

4.3.2 Unified methods of teaching:

15 of the teachers commented that in the inclusive mainstream classrooms the instructional facilities cannot cater for all individual needs; that is, all the students are taught together under one method: no account is taken of each girl's level of learning, and the instructional approach is the same for everyone. Razan explained that:

"The teaching method in the mainstream classroom is a general one, and it is rare that teachers change their method to suit children's specific needs"

Furthermore, 11 of the participants stated that the resource room offers a variety of teaching methods. It was explained by specialist supervisor Deema that:

"*In the resource room, it's completely different. After identifying the child's particular disability, the educational equipment and facilities will be set accordingly. Facilities and teaching strategies will be in accordance with the disability of every girl in order to achieve the aim specified in the individual educational plan during the study year or during the class in general*".

4.3.3 Attention by the teachers:

13 participants indicated that in the inclusive mainstream classrooms all the teachers' attention and focus are on explaining the subject to all the students regardless of their individual differences or their academic ability. To explain this, Mona said that teachers' attention in the mainstream classroom is to all children, assuming that they are all the same, and no special attention is given to SEN students. However, the resource room gives more specialized and directed attention to SEN students. Specialist Hend explained that:

"*In the resource room the attention of the teacher is concentrated on the specific learning difficulty experienced by each individual girl … the teacher focuses on identifying her potential, recognising the type and extent of her disability, and assessing her academic needs*".

4.3.4 Numbers of students:

12 specialists agreed with the estimates of the numbers of girls in the typical mainstream classroom and in the resource rooms. The resource rooms have fewer students and they work in smaller groups (or individually) compared to the mainstream classes. Specialist Layla said:

"*There are more girls in the mainstream classes. The numbers range from about 15 girls as a minimum to about 25 as a maximum regardless of their academic potential or IQ*".

This is very different from the typical resource room: "*In the resource room, teaching is on an individual basis … it can be collective only if the number of girls with learning disabilities does not exceed three and if they have the same learning difficulties in the three core subjects (reading, writing and maths)*".

4.3.5 The educational aims:

10 specialists agreed that there is a difference between the educational aims of the mainstream classroom and the resource room. It was explained that teaching in both classrooms is generally done with different methods in order to teach a particular topic. Specialist Rahma stated that:

"*In the mainstream classroom, the teacher has a common educational aim; to teach the topic to all students at the same time and to the same level. Though some girls will be distracted and may fail to comprehend the topic, possibly because the information is not explained clearly or simply, or if the teacher uses a method different from the traditional method of teaching*".

On the other hand, it was explained that the resource room has a more focused and specific aim which was to help those in need. Specialist Rahma explained that:

"*The resource room is devoid of distractions and helps the student to concentrate. This is because the specialist teacher identifies the educational requirements of the students and tries to make the information reach them in a simple, interesting, enjoyable and completely different way from the approach used in the mainstream classes".*

4.3.6 Lesson duration:

Nine interviewees said that the SEN girls spends fewer hours in the mainstream classrooms compared to other students. However, it was agreed by all that more time is spent in the ordinary classroom compared to the resource room. Specialist Rabab explained: "*A typical special needs student spends between one hour and two-and-a-half hours of her day in the resource room according to her academic needs and the type of her disability. But she still spends more time in the mainstream classroom*".

4.3.7 The differences between the classrooms:

Finally, it was commented by 3 participants that there are no real differences between mainstream classrooms and the resource rooms. They claim that both rooms have similar equipment and offer no physical differences. Said specialist Mona:

"Both kinds of classrooms … are fully equipped with all facilities and modern equipment".

There is some disagreement on this point, some other teachers asserting that the resource rooms generally have facilities better suited to the needs of the SEN children.

4.4 Experience of teaching in resource rooms and mainstream rooms:

4.4.1 The resource room:

The participants were asked about their experiences of teaching in resource rooms. All stated that they worked with SEN girls in the resource room, and all noticed that the girls demonstrated positive improvements in their regard to their skills and wellbeing (academic, psychological, and social). For example, specialist Lama, added that:

"*Their self-confidence and potentials have been promoted because they were treated with close attention and continuous motivation from the teachers*".

Specialist Layla added:

"*The resource room provided strengthening support that enabled the characters of the girls to benefit much more than when they attend the mainstream classes*".

In addition, specialist Ranya stated that such benefits are often achieved by:

"The variety of innovative educational equipment that is developed by the teachers … these helps overcome their educational weaknesses and further enhance their strong points".

Specialist Nora added:

"*I dealt with a special needs student who was shy, unsociable, and introverted in the mainstream class room. Then she became self-confident and self-assured through the support of the teacher in the resource room. The teacher motivated her educationally and psychologically, and fostered her social confidence*".

4.4.2 The inclusive mainstream classroom:

Eighteen of the specialists who were interviewed said that they worked with SEN students within mainstream classrooms, noticing that many were shy and introverted. Ten interviewees commented on the lack of motivation of many SEN children when they are located within a mainstream class; and nine said that when in the mainstream classes the SEN girls often experienced low levels of attention and more distraction**.** These were the main negatives that the SEN students experienced when in mainstream classrooms. This is well summarised by Wafa who stated:

"I am experienced in teaching SEN children in mainstream classrooms. I can say that most are affected negatively if not dealt with in a suitable way. I could always sense shyness and introversion, and their attention is not always one-hundred percent … some of the SEN children can be easily distracted"

On the other hand, specialist Dalal stated:

"Despite the disadvantages that I have experienced in inclusive mainstream classrooms I can say that personality and social skills are often improved for the SEN students. Although I would say that such students will always require special attention in or out of the classroom".

4.4.3 The Challenge:

Five interviewees spoke of their experiences in the inclusive mainstream rooms as challenging, and they highlighted some of the difficulties they faced. For example, Layla stated that:

"I really think it is a big challenge teaching student of different abilities within the same environment. I do not think we can always achieve our aims this way. There is always a need for more attention and extra work with SEN students".

4.4.4 Research Questions:

Returning again to review the research questions in the light of this data, the information provided above highlights the central importance of the resource rooms. Despite the separation and segregation of the resource room it is clear from the range of comments by teachers that they perceive the resource rooms as fulfilling key functions. Above all, the rooms offer some SEN children a better place in which to learn; a place where they can receive close and personalised assistance. However, the comments cited above reveal that teachers have mixed views of resource rooms. Attendance in a mainstream room, they note, has both positive and negative influences, and neither outweighs the other. Inclusion can enhance the social confidence of some SEN girls, but for others it can be a place of humiliation if they are unable to comprehend the work or to 'keep up'. The classroom experience can be difficult for teachers too, because they may be unable to devote sufficient attention or time to help all their pupils. This issue is examined in more detail in the following chapter (Discussion).

4.5 Impact of the mainstream classroom:

Specialists were asked to describe the effects of the mainstream classes on the SEN girls. They were asked to indicate if the inclusive classes were of positive or negative influence. Ten said that the settings of the mainstream classrooms were generally unsuitable for the needs of girls with specific difficulties. Some of the themes and issues that emerged from the interviews are discussed below.

4.5.1 Negative impact:

4.5.1.1 The lack of the knowledge:

9 of the participants stated that there is a lack of knowledge among teachers about the individual differences of students. It was also explained that this negatively affects SEN students. Said Rehab:

"A class teacher's lack of knowledge of the individual differences experienced by SEN children is a problem. Students who are ignored can feel bored, disappointed, and neglected".

4.5.1.2 Distractions and devoted time:

5 specialists highlighted that in the mainstream classrooms typically-developing students can also suffer if a teacher is distracted by the needs of SEN students. Though most of the time typically-developing children have the lesson designed for their needs. Lamya explained:

"Some teachers might give more time to SEN children, leaving other children to benefit less. Other teachers might give no attention to SEN children. Both groups can be negatively affected. This leads to their distraction, inattention and reduced learning by all".

4.5.1.3 Psychological impact:

Another theme that arose is that the mainstream classroom can negatively impact the wellbeing of SEN students. Four specialists indicated this was the case; for example, Noha explained:

"Being in a large mainstream classroom can expose SEN students to bullying and psychological harm. Some children are bullied because of their disabilities, and it is noticed that they psychologically suffer as a result of their learning difficulties".

4.5.2 Positive impact:

4.5.2.1 Adequate environment:

Conversely, 6 of the interviewees asserted that the mainstream classroom is a suitable setting for some SEN girls. Participants stated that the mainstream classroom can be helpful for determining the educational assistance required by the SEN children and for creating an inclusive and suitable setting. Manal stated that *"mainstream classrooms are adequate and essential; they are a parameter that can be used in order to facilitate the type of learning that is required in the resource room"*

4.5.2.2 Gaining new experience:

five participants commented that SEN students gain information and new experiences as a result of being in the mainstream classroom. Specialist Reema claimed that:

"Mainstream classrooms provide a typical place for typical development … they provide SEN children with new experiences due to their interactions with others"

4.5.2.3 Better social interactions:

five participants stated that the environments of mainstream classroom provide the girls with an opportunity to interact with other students and so enhance their social skills. For example, specialist Dana stated that:

"*The classroom is the main environment for teaching the SEN students. There they study the curriculum together and they socialize. These interactions increase the girls' self-confidence and self-esteem"*

4.5.2.4 Positives and negatives depending on teachers:

8 of the 23 specialists answered by saying that the mainstream classroom has both negative and positive effects for SEN girls. They said that it is the teachers' level of awareness and knowledge on how to deal with these girls that determines the effects (positive or negative). By being aware of individual differences teachers can pay more attention to those who need help the most. Awareness allows cooperation and collective action by teachers who can assist SEN girls to integrate and be accepted in inclusive classes.

"The teacher plays a great role in determining the impact of the mainstream classroom; the better teachers are able to use their skills to positively benefit the children. It is very important for an exchange of information and experiences between mainstream teachers and specialist working with SEN children inside the mainstream classroom and in the resource room".

4.6 Impact of resource room:

Participants were asked to report their experiences of the effects of the resource rooms on the girls who attend. From the experiences of 17 specialists it was said that resource rooms have both positive and negative impacts on their academic work and their psychological wellbeing. By reviewing all answers, the following themes emerged:

4.6.1 Positive impact:

4.6.1.1 Attention and concentration:

According to 8 participants, in the resource rooms the SEN teachers are better able impart the required learning. The teachers are able to hold the student's attention and concentration with a variety of techniques. Fadya stated that:

"The resource room is a focused environment that dedicates more time for SEN students who are able to improve attention and concentration as the session is tailored to their needs.

4.6.1.2 Overcoming disabilities and enhancing confidence:

6 participants explained that the resource room has a positive psychological impact as it enhances SEN students' self-confidence and positive outlook. Specialist Laila stated that:

"The resource room can offer SEN students better support and additional teaching which in turn can lead to better confidence and a more positive approach. In some circumstances, the resource room can help students to overcome their disabilities and feel better about themselves."

4.6.2 Negative impact:

Three specialist teachers stated that there is also a negative impact of the resource room on SEN children. They explained that their attendance marks them as being different and so allows other students to bully them and make them a target. Malak stated that:

"Despite the advantages of the resource room there is a reality that it allows for categorisation and discrimination between students. The attendance of the girl with specific learning disabilities in the resource classroom exposes her to snide offences (such as being called lazy, stupid, or a failure) from her colleagues in the mainstream classroom. This is psychologically damaging".

4.6.2.1 Obstacles to learning in the mainstream classroom:

The interviewees were asked about their experiences in regard to obstacles which might prevent SEN girls from studying all subjects in the mainstream classroom. Most (19) identified various barriers or obstacles, and these are discussed below.

4.6.2.2 Varying teaching methods:

it was stated by 9 specialists that SEN girls need a variety of teaching methods and strategies, these being enhanced by interesting instructional facilities and equipment. Such methods are often different from those used by teachers of mainstream classes. Samar stated:

"Typically-developing students are often taught with a few traditional methods, however many times such methods are inappropriate for SEN students. They may need specialised teaching skills and methods so that they can comprehend the topic and engage in the classroom"

4.6.2.3 Distraction:

Distraction was considered one of the most important obstacles according to 8 interviewees. They said that SEN students are often easily distracted in mainstream classrooms. For example, Nada stated:

"Distraction is a major obstacle. SEN students find it hard to concentrate and can be easily distracted, and that impacts on them being able to engage and fully learn all topics in the mainstream classroom".

4.6.2.4 Lack of teacher experience:

Four of the specialists indicated that SEN teachers vary in their levels of experience, and this is another issue when considering the benefits and disadvantages of the mainstream classroom. Danah explained:

"Some teachers are not well equipped nor have the necessary experience to fully utilise the facilities of mainstream rooms. Thus, the advantages of such rooms disappear. Some teachers find it hard to use different teaching methods to suit all educational abilities"

4.6.2.5 Room Setting:

three interviewees said that mainstream rooms have to be suitable for all children, but often this is not achieved. The setting is reported to be an issue in the process of inclusion in mainstream settings. Specialist Dalal stated that:

"*Proper lighting, comfortable seating and desks, and ventilation have to be suitable for the relatively large numbers of children who attend mainstream classes. The duration of the lesson times is also a consideration; if too long the SEN children can lose concentration; if too short there may be insufficient time for the girls to acquire the target skills. The length of the lesson may also decrease the chances for the girls to participate with the teacher and may not allow the teacher to cater for their individual requirement*".

4.6.2.6 Family role:

According to three specialists the family's role is an important one in integrating SEN students into mainstream classrooms. According to Nora:

"*The role of the family is one of the most important factors that influences (hinders or helps) the integration of the girls into mainstream classes. The family's role is to support their daughter outside the school, to strengthen her academic skills, and help promote her self-confidence. And this can be achieved through continuous cooperation with both the mainstream and resource-room teachers. Their collaboration can provide continuous follow up to their daughter's academic, psychological, and social progress inside the school*".

4.7 Obstacles to learning in the resource room

In this part specialists were asked to identify any obstacles which they have encountered which might affect the girls' ability to study all topics in the resource room.

4.7.1 Concept of isolation:

From the point of view of 18 teachers, the feeling of isolation that some girls experience when in the resource room within the precinct of the mainstream school is unacceptable, and their right to inclusion is thus ignored. Specialist Rabab said that:

"*The girl student with specific learning difficulties has the right to attend the resource class during the day in order to receive special assistance, however the idea of studying all topics in the resource room is not acceptable as it promotes isolation and less integration with others. Integration with others is a right they have*".

4.7.2 Time in the resource room:

According to 7 participants time constraints are a critical obstacle. The limited time available within the resource room does not allow all topics to be studied on a one-to-one basis. Hend said:

"*There isn't enough time for the specialist teacher in the resource room. Those teachers have considerable experience in catering for girls with specific learning difficulties also attend mainstream classes*".

4.7.3 Different schedule:

there is only one recourse room in each inclusive school hence it is difficult to teach SEN students all the topics in the curriculum. Ten participants stated that it is extremely difficult to teach only a few subjects to the SEN children who attend the resource room. For example, Rabab explained that,

"Resource rooms need planning and new schedules and perhaps curriculums to fully absorb all SEN children and maintain their progress in line with the other children. Schools might need extra staffing and more resources to do so. New schedules will have to be set in order for the SEN children to match the schedule of the mainstream classes. But the resource room schedule should not conflict with the main classes".

4.7.4 Shortage of SEN teachers:

6 participants asserted that in order for SEN students to learn all parts of the curriculum when in the resource room, more trained teachers need to be recruited – a difficult task. Fatima stated that:

"*Even if such an option of teaching all topics in the resource room was possible we do not have enough teachers to teach all topics. As a result, I do not see it possible now"*

4.7.5 Not enough resource rooms:

5 supervisors stated that in order to allow all SEN students to study all subjects when attending the resource rooms there need to be many more such rooms in the schools. Afnan explained that,

"The resource room is used by SEN children from different year groups, and if they need to study their full time then there should be more resource rooms in each school in order to accommodate for different age groups and different disabilities".

4.8 Responsibilities of mainstream teachers

Participants were asked to state their views and experiences of the responsibilities and roles of the mainstream teachers in regard to the SEN students. In doing so several themes emerged. 23 SEN teachers spoke about the importance of providing training courses for mainstream teachers about how to deal with SEN children. Particularly highlighted was the expectation that mainstream teachers should take into consideration the individual differences of all students with special needs.

4.8.1 Individual differences:

10 specialists explained the importance of being able to identify specific educational needs and teach accordingly. The most important comments were mentioned by specialist Maha, saying that:

"*Mainstream teachers should take into consideration the individual differences of all students with special needs and to cater for them in all aspects (academic, social, psychological, and with suitable forms of communication) so that they can be more self-confident inside and outside their classroom environments*".

4.8.2 Enhance relationships and interactions between students:

8 specialists mentioned the role of mainstream teachers in enhancing cooperation and relationships between students of all levels. One teacher, Nora, stated that:

"*The mainstream teachers should try to encourage their students to continually enhance their classroom relationships by participating in activities inside the class and in non-classroom*

activities when outside. It is important to not hinder SEN students from attending their classes in the resource room".

4.8.3 Raising awareness:

8 specialists explained that mainstream teachers should have better awareness of SEN children and their particular disabilities; similarly, better awareness should be encouraged among the students themselves. Abrar explained that

"*Typically-developing students should take into consideration their colleagues with special needs who are present in the mainstream classroom. An SEN student needs to feel equal and similar to others except that she uses the resource room. Students needs to be aware of others who may be less fortunate, and support them. Students awareness can only be improved if teachers themselves are better skilled and prepared*".

As for teacher's awareness and knowledge, specialist Soaad stated that,

"*In terms of awareness, the mainstream teacher should take into consideration the way she deals with girl students who have learning difficulties, and this should be done in a way that does not attract the attention of other children. For example, by simplifying the subject and the language so as to enable the SEN students in the class to understand the subject, to memorize the skills required for the topic, to understand it and know how to apply it".*

4.8.4 Preparation:

5 specialists stressed the importance of lesson preparation by mainstream teachers. Teachers need to prepare their sessions in a way to meet all needs, and it usually entails considerable planning and thought if all children are to be catered for. Lana explained that:

"It is important to prepare for the mainstream classes so that both the mainstream and special education girls are taught appropriately. We can help achieve this by the special needs girls sitting on the front seats. Teachers have to care for all of the girls' feelings and psychological wellbeing. If a girl fails to learn accurately it is essential that the SEN girls do not see it as a threat that they should attend the resource classroom. The teacher must positively encourage all children and enhance the spirit of competition and cooperation among them".

4.8.5 Teachers' reluctance to accept SEN children:

5 specialists explained that there was reluctance by some teachers to accept SEN students into their classrooms because they think they cannot help them. Reem clarified that:

"*The mainstream teacher might refuse to have a girl with specific learning difficulties in her class because it doubles the work and because of the short time available for lessons. Some teachers lack the ability to control all the students in class. Some mainstream students try to imitate the behaviour of the girls who have learning difficulties. Finally, there isn't any additional financial incentive for mainstream teachers to take on extra work*".

4.9 Responsibilities of special education teachers:

Specialists were asked to state their opinions about the responsibilities and roles of the resource-room teachers in regard to their students.

4.9.1 Diagnosing Cases:

Overall**,** 18 specialists agreed that a central role of specialist teachers entails diagnosing each case through her participation in a diagnostic survey. This should be conducted with a team consisting of the school manager, a psychologist, a social specialist, the mainstream teacher, and the family of the student. Nahed explained

"Initially the SEN teacher needs to classify and diagnose the student's different educational needs by working with other specialists to determine a diagnosis"

4.9.2 Setting a Plan:

15 reported that the SEN teacher is required to draw up a plan suitable for each SEN student. Marwa narrated that the SEN teacher is required:

"To set an individualised educational plan suitable for addressing the child's disabilities. Furthermore, teaching every case individually strengthens the points of weakness and enhances the child's strong points"

4.9.3 Preparation of the Resource room:

12 of the specialists stated that it is important to properly prepare the resource room so that its facilities can be used effectively. If used properly the instructional aids can help each child maintain concentration and they can help the child enjoy her time in the resource room. Interviewee Dalal said:

"*The specialist teacher should take into consideration the connections between the lesson which she teaches in the resource room and what is being done in the mainstream class"*.

4.9.4 Cooperation between SEN teachers and mainstream teachers:

7 participants spoke about the importance of cooperation between teachers in the resource room and the mainstream room to enable better teaching which can meet all educational needs. Reem added that:

"*There must be a continuous connection between mainstream and specialist teachers so that both are aware of the requirements of the SEN student*. *The resource room teacher must conduct* a *continuous evaluation for every girl by ensuring cooperation with the mainstream teacher*".

4.9.5 Providing support:

6 specialists stressed the importance of providing support and care for SEN students in order to enhance their positive mental wellbeing. Specialist Nora explained that:

"The specialist teacher should seek to understand each of her students and provide continuous encouragement and love so that the student wants to attend the resource room. This positive environment will strengthen her academic capabilities and increase her self-confidence when in the mainstream class".

4.10 Attitudes of mainstream students

Participants were asked to state their opinion about mainstream student's feelings towards their SEN peers who may at times attend the resource room. The interview answers can be grouped into three main themes:

4.10.1 Supportive feelings:

15 of the specialists claimed that most typically-developing students are supportive of their SEN peers. This is often translated in them being sympathetic towards them and helping them. Specialist Reema explained

"I often observe that SEN girls are treated in a nice way especially among the older students. They seem to understand them and treat them in a nice non-discriminating way. Also, mainstream students generally view the SEN girls in positive ways. The special education girls accept their condition and seem to comprehend the reason for their attendance in the resource room. The mainstream girls try to help them and cooperate with each other in the activities outside the classroom".

4.10.2 Bullying:

Despite the positive comments listed above, 9 of the participants reported that SEN students often fall victim to bullying, especially when their form of disability is apparent. They seem to be easy targets for others. Hannan stated:

"Bullying is a major problem in schools when it comes to SEN children. These students are easy targets for others and it does psychological damage to the SEN girls. It is hard for this to be avoided in inclusive schools.

4.10.3 The same feelings:

7 supervisors stated that many students have the same feelings towards SEN girls as they do towards their typical peers. Tahani stated:

"Some students just treat SEN students typically … just like any other students. They form friendships, joke, and laugh together like all students".

4.10.4 Role of teachers and schools:

Further information from the specialists explain the role of teachers and schools in promoting positive feelings and attitudes between students, regardless of disabilities. Increased awareness should promote positivity and acceptance. Dima said:

"I always encourage teachers and schools to increase awareness among students, and I teach them about different educational needs. I believe this is the main way to promote positivity and acceptance. Also, issues of bullying need to be tackled when it comes to SEN students … the harm is great"

4.11 Effect of inclusion

Participants were asked about their opinions regarding the impact of inclusion on both the mainstream and SEN students. The following themes emerged

4.11.1 Better positive inclusive environment:

10 of the participants commented that the inclusive environment is likely to promote overall acceptance and a positive climate where all students feel equal within the school community. Specialist Deem stated that,

"*Inclusion provides a better environment for the students with special needs … they feel part of the bigger community in the school and feel integrated and included in all activities*".

Specialist Wafa added that:

"*It allows them to participate with their mainstream colleagues in school activities, to cooperate and make friendships*".

Similarly, Noha said:

"*Inclusion helps the special-needs students in acquiring new skills and experiences … some like imitating the behaviour of the mainstream students and acquire a spirit of positive competition*".

4.11.2 An educational right:

Sixteen participants spoke about the right to be included in mainstream schools. Explained Dalal,

"*Inclusive schooling gives SEN students the opportunity to enjoy their educational and social rights like the mainstream students in the inclusive school. Under no circumstances should they be discriminated against or excluded*".

It was further added by another specialist, Reema, who said:

"*Inclusion equalizes between the mainstream children and the SEN student in acquiring learning in the same environment and the same building*".

4.11.3 Overcoming psychological barriers:

It was noted by 8 participants that the benefits of inclusion are important to SEN students as it allows them to overcome psychological barriers and improve their wellbeing. For example, supervisor Rehab stated:

"Inclusion helps the special education student and her family to overcome the psychological and social barriers and fears, like the feelings of embarrassment and poor self-esteem because of the impairment".

Hoda confirmed that: "*The inclusive schools provide girls with feelings of self-satisfaction, self-esteem, and self-confidence*".

4.11.3 The existence of the resource room:

ten interviewees mentioned that inclusive schools provide extra help to integrate SEN students into their schools, and that the existence of a helping hand, such as the resource room, will top-up and compensate for any gaps in the girls' learning. Arwa narrated:

"One of the main advantages of inclusive education is that as well as having the right to study with others, SEN students have access to the resource classroom which will enable them to study in small groups and improve so that they catch-up with other peers. This is an essential part of making inclusive education very successful".

4.12 Advantages of inclusion

The interviewees were asked to state their opinion of the advantages of inclusive education to mainstream students. In doing so it was evident that all themes are relevant, most participants highlighting the positive support and the heightened awareness of the needs of SEN by the other children.

4.12.1 Positive attitude towards SEN students:

Positive attitudes by mainstream children towards SEN students was mentioned by 17 of the specialists. It was understood that inclusive education allows mainstream students to have a better understanding, and ultimately a better attitude towards the children with disabilities. Specialist Nada stated that:

"*The attitudes of the mainstream girls become much more positive towards the girl students with special needs. They acquire the sense of giving, helping others, and accepting responsibilities*".

4.12.2 Consideration for the small community:

As well as positive attitudes, one of the essential benefits of inclusion is to enhance the perspectives and the consideration of small school communities in regard to the girls who have any form of disability. Eleven participants stated that inclusive education promotes better understanding and more positive consideration among mainstream students, teachers, and the community. Specialist Areej stated:

"SEN students are a small percentage within the school. Inclusive schooling allows for other parties … to accept them, and ultimately that will have a great role in encouraging the outside community to welcome them despite all the circumstances".

4.12.3 Increasing awareness among mainstream students:

10 of the specialists emphasized that inclusive education has impacts on the mainstream girls. Being in an inclusive school allows them to become more knowledgeable and more aware of the ways of interacting with their SEN peers. Moreover, the behaviour of mainstream students will improve in regard to the SEN students. Malak stated:

"There are a lot of benefits to the mainstream students. Inclusive education will increase their awareness and enhance cooperation and friendship. Exposure to SEN students will teach them more about life and about other students of different abilities, and ultimately it will improve acceptance".

4.13 Teachers' attitudes

Participants were asked about the attitudes of special and mainstream teachers towards inclusion. A number of themes emerged, as summarised below:

4.13.1 Refusal and negative attitudes:

Sixteen specialists said that some mainstream teachers refuse to accept inclusion for many reasons. Specialist Amal commented:

"Teaching SEN students can be challenging and hence many mainstream teachers refuse to teach them. And when they do teach them they do not meet the standards".

Nada stated:

"*Many of the mainstream teachers feel unprepared and so refuse to teach SEN students because they assume that they will not be able to balance their session and meet the lesson aims"*

In considering the reasons for such negative attitude and for refusal to teach SEN students a number of themes emerged.

4.13.1.1 Lack of awareness:

12 specialists talked about the lack of awareness of children's special needs, summarizing that some mainstream teachers lack the knowledge and skills to deal with SEN students. Specialist, Laila agreed:

"*The main reason for refusing the merger is the lack of awareness by the mainstream teachers regarding the important roles of inclusion on the SEN students and on mainstream students*".

In addition, specialist Nora emphasised that:

"The mainstream teachers' refusal to accept SEN children into their classroom, side by side with mainstream girls, is due to poor awareness and lack of preparation".

4.13.1.2 Lack of experience and inadequate background knowledge:

Eleven participants attributed refusal to teach SEN students, and the negative attitudes of some teachers, to lack of experience and background knowledge of SEN. For example, specialist Noor said that:

"*The main reason behind mainstream teachers' rejection of inclusion is their lack of the background knowledge of the different categories of special needs and disabilities*".

Some interviewees added the issue of identifying individual differences among students. Specialist Sarah said:

"*The reasons for this refusal is the lack of experience of the mainstream teachers in identifying the individual differences of the children in their inclusive mainstream class … and their lack of knowledge regarding ways of working with the SEN girls*".

4.13.1.3 The negative impact of times/schedules:

8 specialists talked about the issue of time limitations for mainstream teachers who find it challenging to dedicate enough time for every child regardless of need. Teachers might feel that dedicating time to SEN students in the classroom would hinder the session's progress and leave other students with less time for assistance from the teacher. Explained Hoda:

"*Mainstream teachers may not welcome the special needs students into the classroom because of the negative impact on the allocated time for the lessons. Time in class can be consumed in keeping discipline and modifying behaviour, leaving little for assisting those with special needs*."

4.13.1.4 Preparing the environment:

Another reason for negative attitudes and refusal to accept SEN children is the extra work required to prepare the learning environment. It is argued that teachers find it hard to prepare an instructional environment to meet all needs. For example, specialist Ghada confirmed that:

"*The mainstream teacher believes that the inclusive program requires her to redirect her efforts to preparing a range of materials to cater for the specific requirements of SEN girls who attend the class*".

4.13.1.4 Positive and welcoming attitudes:

Finally, 6 participants explained that mainstream teachers generally have positive attitudes and that they accept SEN students and try their best to meet their educational needs. However, it was noted that they still need to improve their classroom techniques to reach an appropriate level of teaching.

Specialist Ghadeer stated that:

"From my experience, I can say that the majority of mainstream teachers have a welcoming and positive attitude towards SEN students. They accept them in the school and fully integrate them. However, the quality of their teaching is not always ideal and that could be a result of poor preparation, knowledge, and experience".

4.14 Barriers to inclusion

The participants were asked to state the barriers/challenges that can hinder inclusion. The majority explained that inclusion has many challenges that hinder its success. Those challenges differ from one school to another according to the location of the school, its administration, and the number of students. Analysis of the interviews reveals the following challenges that can impede inclusive practices.

4.14.1 Lack of Awareness and knowledge:

Lack of awareness was identified by 17 interviewees. As previously mentioned, many of the teachers, especially the mainstream teachers, lack awareness and knowledge of special education. Maha said that:

"*The lack of awareness in mainstream schools regarding inclusion and the particular issues of inclusion are the main reason behind the unwelcome tone of many school administrators. The lack of expertise and resources for managing this program (such as a shortage of specialist teachers, social work specialists, psychologists, and special education supervisors) hinders the processing and the application of the inclusive program*".

4.14.2 Inadequate educational environment:

Overall, 8 specialists talked about the educational environment as a potential barrier. The setting needs to have facilities to suit all students, but those facilities are not always available. Specialist Laila stated that:

"*The unavailability of adequate environments is a result of the lack of awareness of the inclusion program. Also, the lack of the necessary preparation facilities and equipment can be a problem".*

Specialist Mona further stressed that:

"*It is important to equip and prepare the educational environment so that it meets the requirements of the various inclusion categories.*

4.14.3 Negative Attitudes:

6 participants talked about the general negative attitudes to SEN students, especially from mainstream teachers who are often accused of neglecting their special-needs students. Although negative attitudes are usually linked to inadequate knowledge and lack of awareness, several interviewees thought that some teachers just did not want to teach SEN students. Specialist Tala explained:

"The negative attitudes of mainstream teachers are a problem. Schools administrators need to address it and teachers need to understand and accept the whole concept of inclusive education. Teachers need to work towards providing a good educational environment for all students regardless of the work involved".

4.15 Improving the process of inclusion

Specialists were asked to state their views of the steps necessary for improving the inclusive program inside mainstream schools. A number of suggestions were cited, these being summarised in Table 60 (below). This list shows the frequency with which the suggestions were mentioned.

4.15.1 Table 60: Possible methods for improving the level of inclusion in mainstream schools

How to improve inclusive education?	Number of Supervisors
Regular training courses to suit all teachers	10
Providing adequate environments; e.g. *school buildings, class rooms, outdoor playing fields, canteen, lighting, ventilation, access toilets, and appropriate teaching facilities.*	16
Cooperation between mainstream and SEN teachers	12
Increased awareness of inclusion by mainstream teachers	17

Increased awareness of inclusion by mainstream students	9
Cooperating with families for better education.	7
Promoting positive links between SEN and mainstream students	6
Conducting appraisals of mainstream teachers	11
Promoting better teaching methods	5
Better session preparations by teachers	4
Providing adequate time for helping SEN students	6

4.16 Summary:

This chapter has summarised and illustrated the main findings that emerged from the analysis of the data from both the questionnaire and the interviews. The very comprehensive information provided above offers answers to the research questions, and these are discussed in detail in the following chapter. It is evident that there are no definitive or unified views about the progress of inclusion in Saudi primary schools, though very useful comments and observations were made in regard to the practicability of teaching some SEN children in mixed-ability mainstream classes. One key theme which emerged was the central importance of the resource rooms. While they may, to some degree, be a reversion to the old system of segregation, nevertheless the rooms offer close and personalised attention to children with specific needs. Most of the teachers who contributed to this study were very experienced and qualified; they came from a diverse range of schools across metropolitan Riyadh and thus their perceptions and experiences may be regarded as fairly representative of the wider teaching service. They usefully identified a number of disadvantages and advantages of inclusion, these being considered in more detail in the following discussion chapter.

Chapter 5: Discussion

Discussion

This research project examined several of the key issues regarding the policies and practices of integrating and including girls with specific learning difficulties in 50 mainstream primary schools in Riyadh, Saudi Arabia. It focussed on the experiences and perspectives of both mainstream teachers and teachers of children with learning difficulties and did not seek to evaluate or quantify the outcomes of the practice of inclusion; rather it examined the issues associated with inclusion, the advantages and disadvantages of inclusion, and in particular the experiences and views of teachers. The findings discussed below make a significant contribution to the understanding of this topic insofar as they highlight various issues that have received limited attention previously – in particular the ambivalent positive and negative influences of teachers' attitudes. These results were broadly similar to those reported by other researchers in other countries, though a number of new and important insights and observations emerged. This chapter explains those insights, and it uses them to answer the research questions.

5.1 Integration and Inclusion:

Before proceeding it is pertinent to note again that 'inclusion' is the term used and favoured by most writers on this subject and by educational systems of many countries, and in this thesis inclusion refers to equity of opportunity for all children within mainstream settings. This term emerged in preference to both 'integration' and 'assimilation' following decades of discussion, confusion, and uncertainty about how best to describe the situation whereby all children, regardless of circumstance, have equal access to, and equal involvement in school activities and all aspects of learning. As noted, inclusion is not now viewed as an either/or situation; that is, total involvement by SEN children in all mainstream class activities, or total exclusion in a 'special' school. Instead it is accepted that there needs to be a range of educational support services (or Continuum of Provision, as it is sometimes described) which can be used according to the particular requirements of the child. However, as yet the Saudi system has not yet been modified to the extent that it can offer all SEN children such a range of services. In a general sense, these terms are similar insofar as they mean 'being together', and in an educational context they refer to the presence of all children (regardless of their physical, social, cognitive, or other differences) in the same classes and schools (Elshabrawy & Hassanein, 2015). However, there are important and subtle differences in the ways in which the terms are used nowadays. In general, integration describes situations in which SPLD children are located in mainstream educational settings (which might have undergone some

modifications), but it is with the expectation that the children with special needs can fit in with the existing structures and existing school arrangements. But the key point about this term is that it implies the physical presence of the children even if there is limited engagement or interaction with others.

Inclusion has a broader meaning that remains debatable but is commonly associated in recent times with the rights of the child to quality of education, participation, and value within society. In Saudi Arabia, and amongst some theorists in the field, inclusion refers to the process of change that provides full access to, and participation in, all the aspects of education experienced by children in mainstream schools (Frederickson & Cline 2002; Rose & Tilstone, 2002). Inclusion should be considered as a process, but it also entails accessible environments, and in school settings it usually requires programs and courses to be adjusted to meet the needs of each child. Merely sitting a child in a regular school classroom may not be considered as inclusion.

5.2 Discussion of Findings:

The following sections discuss the main findings of this project, and they then relate the findings to the research questions.

5.2.1 Finding #1: Philosophy and Implementation

Firstly, a significant finding of this enquiry is that there is an apparent inconsistency between the philosophy and the implementation of inclusion. While all respondents voiced strong endorsement of both the philosophy and principle of the widespread view of inclusion in Saudi Arabia (that is, education for all in mainstream settings), nevertheless many expressed considerable concerns about the practicalities of teaching classes which comprise both typically-developing students and those with special needs. These concerns emerged when the participants were questioned about the advantages and disadvantages of inclusion. Indeed, in many instances they stated that children would probably benefit more from attending (at least some of the time) resource rooms, equipped with specialist facilities, in which teaching is conducted by specialist teachers and which are located within mainstream schools (but separated from mainstream classrooms). In this way the teachers expressed a view more in line with promoting the school as an inclusive system where different children received different levels and types of support - though not necessarily in the same location - in order to realise their potential, but the overall policy of the school was to give all children the opportunity to achieve and participate.

The continuing importance of such special-needs services and facilities had been mentioned by writers such as Florian (2007) who commented that while mainstream teachers need to adjust their classroom strategies to ensure inclusion they also require assistance from specialist support teachers or from a nearby resource room. Similar views of inclusion have been expressed by Konza (2008), and Kliewer and Landis (1999), all of whom found that special-needs services and facilities should continue to be provided in conjunction with mainstream classes. Further, they considered that SPLD children benefit most when they have ready access to special-needs facilities and teachers and also to mainstream schools and mainstream peers. Some would argue that this does not constitute full inclusion and this would contravene the dominant definition of inclusion in Saudi Arabia but others would see this as a positive and realistic way of promoting equity through diversity of provision, where, the children are fully included in mainstream classes some of the time, but are taught by specialist teachers in special facilities at other times.

5.2.2 Finding #2: Advantages and Disadvantages of Inclusion

The second finding is that there was neither overwhelming support for, nor rejection of, the policy and practice of inclusion as defined in Saudi Arabia. That is, the responses were mixed and varied, participants usually qualifying their comments by stating that while there may be benefits for the SPLD children there can also be disadvantages for the SPLD children – and indeed for the mainstream students too. Many other researchers have noted similar findings; for example, a large-scale review by Avramidis and Norwich (2002, p 130) concluded that overall there has been "no evidence of acceptance of a total inclusion or a 'zero reject' approach to special education provision".

This finding sheds light on the third research question concerning the role of the resource room, most respondents stating that the rooms (and the specialist teachers based in those facilities) were indispensable if inclusion is to be adequately implemented. The qualified support for inclusion was also expressed by the notion that SPLD children could experience inclusion within the mainstream classroom on a part-time basis; that is, spend some time in a mainstream class and some time in a special resource room. Similar views by teachers were recorded by Forlin (1995). This finding also accords with a study conducted in Saudi Arabia by Al-Hano (2006) who noted that children selected for the SPLD program benefited from the individualized instruction provided by specialist support teachers. Moreover, in his report he made the pertinent observation that the resource rooms were not seen as a place that separated

school children with disabilities from 'normal' or 'regular' school children; instead the resource rooms were viewed as supplementing and complementing the work done in mainstream classes. The findings of this study certainly endorse Al Hano's (2006) work, and it is evident that many participants viewed resource rooms not as alternatives to mainstream classes but as places where children could obtain extra support in their learning.

However, it is a particularly telling point to note is that in the questionnaire the following statement received the highest level of endorsement from participants: "A good approach to managing inclusive classrooms is to have a special education teacher be responsible for instructing the girls with special needs". This statement is, in fact, an admission that many (perhaps most) teachers would prefer to avoid having to teach SPLD children – in effect, by moving the children to other teachers.

5.2.3 Finding #3: Experiences of Inclusion in Saudi Arabia

The principle of inclusion in varying forms has been adopted globally and it was apparent during this project that the Saudi education system has taken firm action to implement inclusion of all children in mainstream schools– albeit so far with mixed results. However, a key finding here is that while there has been a high degree of integration of SPLD girls into mainstream schools it is evident that full inclusion of all girls into mainstream classrooms has not yet been attained. This finding helps answer research question 2 because it draws attention to the obstacles which face teachers as they seek to devise better avenues for achieving inclusion. As Al-Mousa (2010) explained, in Saudi Arabia the conceptualisation of inclusion has qualifications; that is, it does not describe a system of inclusion which is open to all, instead being characterised as education in the 'least restrictive environment'. In practice, this means that a student who has a disability should not be restricted in terms of educational access, and that he/she would, as far as practicable, have the same opportunities as non-disabled children. They should not be restricted or confined in terms of their learning, and enjoy access to the general curriculum and to participate as fully as possible in all activities and programs. Moreover, in order to achieve equality of opportunity, it may be necessary for some students to be provided with additional services within classrooms as well as supplementary aids in resource rooms.

This is an important finding because it illustrates situations in which the broad concept of inclusion in Saudi Arabia may need to be modified by acknowledging that an approach based more on schools as inclusive systems may be more fitting. Inclusion of all children in

mainstream classrooms for all activities may be an ideal, but in reality, inclusive practices may always need to be adapted and qualified according to the particular needs of the children, according to the topics being taught, and perhaps according to unforeseen local circumstances. This finding again highlights the importance of resource rooms which complement the work being undertaken in the mainstream rooms. This provides an answer to research question 2 because it confirms that teachers see resource rooms as indispensable elements of inclusion. Within the context of mainstream schools, the resource rooms and the presence of specialist teachers are considered to be integral to the teaching process. However, in a seemingly contradictory way the very existence of resource rooms, and the need for specialist teachers to work collaboratively with mainstream teachers are, in some respects, acknowledgements that the version of inclusion endorsed by Saudi Arabia may not be the best way forward in practice.

Nevertheless, the Saudi policy of inclusion has far-reaching practical implications, and in her examination of inclusion in neighboring Jordan Al-Hinawi (2003) noted that inclusion required many changes to teaching approaches, to school facilities, and to curricula. That is, mainstream teachers needed to receive training in how to teach children with disabilities, school grounds may have required modification (for example, to facilitate wheelchair access), and curricula and suitable learning materials needed to be developed or adapted. In the USA, the policy of inclusion has been regularly revised and refined. For instance, the *Individuals with Disabilities Education Improvement Act* of 2004 (IDEA 2004) was just one iteration of the policy since it first emerged in the 1970s, and since then there have been many policy amendments designed to improve inclusive procedures.

5.2.4 Finding #4: Catering for Differences

Information to address research question 2 (advantages, disadvantages and obstacles to inclusion) stems from the experiences of teachers who described the challenges they faced when working with children who exhibit different impairments. There are no definitive solutions to the many challenges of inclusion and nor is there a one-size-fits-all approach to inclusion because the range and severity of disabilities are beyond simple definition. Participants recognised that some children with relatively mild forms of impairment can readily benefit from inclusion in the mainstream classroom; however, other children (such as those with diminished cognitive function or disruptive behaviours) might not. In this study, a major determinant of teacher attitudes to inclusion was the nature and severity of each child's disability; teachers had strong views about which students could be accommodated readily in

mainstream classes and which needed to be taught in other settings. This finding also confirms the previous work by other researchers such as Avramidis and Norwich (2002, pp134-5). Similarly, Abdeljalil (2004) explained that the extent to which SPLD children are able to benefit from inclusion in mainstream classrooms depends largely on the nature and extent of their disability and on the degree to which mainstream teachers are capable of working with children with particular impediments. Work by Al Abduljabber (1994) and later by Al Ahmadi (2009) examined the views and experiences of school principals and teachers who likewise commented that the nature and complexity of a child's disability strongly influenced the ability of the child to benefit from inclusion in a mainstream setting. Other writers and researchers, such as Konza (2008) and Ford (2013), agree, noting that mainstream education for all is an ideal that may not always be realised because of the practicalities of catering for many different forms and levels of disability at the same time.

5.2.5 Finding *#5: Influence of Teachers' Experience and Age*

Teachers' perspectives were to some extent influenced by their age or teaching experience, data on this issue providing partial information for addressing the research questions. Some slight statistical differences between these variables were evident in the questionnaire responses, but the interview survey was more revealing because respondents of all backgrounds (young and old, novices and experienced) voiced support for some aspects of inclusion while simultaneously expressing concern about the practicalities and effectiveness of inclusion. The older trained teachers, perhaps more established and with greater experience of different types of SEN, were slightly more supportive of inclusion than the younger teachers. The data are not definitive on this point, though informal passing comments by some participants suggested that the younger teachers may, when confronted with the realities of teaching children with different forms and levels of disability, have found the work to be more challenging than expected. It was not possible to identify if these different age groups had received noticeably different types of training, though it was apparent that the earlier training programs were of a rather general nature and could not prepare trainees for the many types or levels of learning disability that would be encountered in classrooms. This finding varies slightly from that of other writers such as Leyser *et al*. (1994) who found that younger teachers and new graduates were more supportive of having SEN children in their classes – though whether this stemmed from their youthful idealism or from more comprehensive training was not clear. Nevertheless, it does highlight the point that teacher training programs need to be comprehensive as well as being constantly refined to ensure that they meet the evolving needs

of inclusion practices. This finding provides one important answer to the issue of how inclusive practices could be improved, because it confirms again that appropriate and regular training can significantly improve teachers' ability to deal with different inclusive scenarios.

Similar research observations in Saudi Arabia were reported by Al-Kahtani (2003) who stated that young teachers, and new teachers, were more positive in the views about inclusion and generally more willing than older teachers to have SPLD children in their classes. However, the associations (if any) between age, professional experience, training, and attitudes should not be overstated. Indeed, different researchers have described markedly different scenarios; for example, Avramidis and Norwich (2002) found that age and years in the classroom were not always reliable guides to attitude (younger teachers not necessarily being more supportive than older experienced teachers), and even teachers who had undertaken training courses were not necessarily more sensitive to the needs of SEN children in their classes.

The training and education of the participating teachers were to some extent linked to their views and experiences of inclusion – this finding being relevant to answering research question 1 and 2. Those who had undergone specific and extensive training in the use of instructional methods suited to children with physical and cognitive impairments expressed more positive outlooks regarding the advantages and benefits of inclusion of all in mainstream classes. A similar finding was described by Al-Faiz (2006) who reported a positive correlation between professional training in SPLD methods of teaching and the attitudes to inclusion of teachers. The importance of pre- and in-service training has been stressed by many (Rouse, 2007: Stephenson *et al*, 2012), it being noted that effective training programs can have far-reaching benefits to classroom practices.

5.2.6 Finding #6: Benefits of Inclusion

Findings on this issue provide useful answers to research question 2, the data strongly indicating that the teachers perceived inclusion in mainstream classrooms to have marked social and personal benefits (such as feelings of self-confidence and acceptance) for SPLD students, though the overall educational benefits are less certain and depend on the nature of a child's disability as well as the subject being learned. That is, children with mild physical or intellectual impairments could participate in, and be more readily accepted in, the activities of the typically developing children. However, those with severe impairments were less likely to be capable of joining-in. Recent surveys have likewise identified strong social benefits of

inclusion, and in particular heightened self-confidence and feelings of self-esteem enjoyed by the SPLD children. For instance, work by Al-Makanin *et al* (2014) and Alnahdi, (2014) reported enhanced social competencies among students with SPLD; in their respective reports they explained that teachers had observed markedly increased social interaction between children (both SPLD and mainstream), with laughter, play, and talking during their leisure time.

5.2.7 Finding #7: Administrators and Principals and Inclusion

Although it was not a focus of this investigation, it is relevant to observe that participants did not express any strong comments about the effects on inclusion of school administration. Yet administrators [particularly principals and governing councils] can have a strong influence because it is they who have leadership responsibilities, set the agenda, and allocate the resources. Several previous researchers have highlighted the importance of head-teachers/principals in establishing an ethos of inclusivity amongst teachers and parents (Rouse 2007; Florian, 2007). Perhaps the only indirect criticism by teachers was that classrooms in their respective school sometimes lacked suitable facilities for inclusion (such as access, reading/writing materials, and outdoor equipment) – and that is a reflection on school management. The importance of school administrators as agents of inclusion was reiterated by Al Quarnie (2007: 2011) who stressed the key roles of primary-school principals in promoting the objectives of SPLD programs and in the provision of learning and socialisation facilities for SPLD students.

5.2.8 Finding #8. Review of some Other Factors Influencing Inclusion

Before applying the findings to address the research questions it is appropriate now to discuss the implications of the key information provided by the participants. The overall results showed a negative correlation between participants' evaluation of the advantages and the disadvantages of inclusion (Table 24) – this finding being important for answering research question 2. This indicates that the higher the participants evaluated the advantages the lower they were likely to evaluate the disadvantages. No significant correlation was found between the advantages and barriers, or between the advantages and methods. As might be expected, the disadvantages were found to be significantly and positively correlated with the barriers.

In addressing the research questions, it is most important to recognise that many factors shape the attitudes, beliefs, and classroom performance of teachers. Training and experience are foremost among those factors, but there are various customs, traditions, and social

influences too, though it has not been possible to consider them in any detail here. Gaad and Khan (2007) explained that people in the Gulf region have traditionally had unfavourable and suspicious attitudes to individuals with special needs or disabilities. They point out that in the West a rights-based approach is encouraged regarding disabilities whereas in the Gulf tribal and familial bonds are more important, families being rather ashamed of any member who is seen to have an impairment. However, such attitudes are changing, as evidenced by the policy of inclusion, but attitudes and values change slowly. The slow pace of change in such conservative societies means that it may take some time for inclusion to be achieved.

The links between professional background and teachers' attitudes to inclusion are not always clear-cut, but an important finding here is that the nature of children's' impairments are more important determinants of teacher attitudes than the teachers' own background and training. This accords with Avramidis and Norwich (2002) who found in their critical review that the attitudes of teachers tend to be influenced more by the nature of each child's particular condition rather than by teacher-related factors such as age or training. In the context of the Middle East the same conclusions were recorded in Jordan by Al-Hadidi (1998) and in Saudi Arabia by Al-Khatani (2003). So too, early work in Australia about attitudes to inclusion by Center and Ward (1987) suggested that attitudes were strongly influenced by the nature of the disabilities and/or educational problems being presented by the children and, to a lesser extent, by the professional background of the teachers. Center and Ward (1987) noted that pre-school teachers strongly endorsed the principle of inclusion while mainstream classroom teachers were only lukewarm in their support. Similar mixed responses were described in another Australian study by Ward and Le Dean (1996) who said that the over-riding determinant of teacher support was not their experience, age, or training; rather it was the nature of the disability experienced by the students who would attend their classes cited in Avramadis, Bayliss & Burden (2000). Both Al-Masaood and Al-Jabbar (2002) examined this issue in Arab countries and concluded that the main variable in determining teachers' attitudes and teachers' acceptance of inclusion are the specific disabilities experienced by the children; that is, teachers are generally more accepting and supportive of children with mild physical impediments but are negative and unwilling to include children with severe levels of disability (and especially severely reduced cognitive functions).

5.2.9 Finding #9. Barriers to Inclusion

An important finding of this project is the mixed responses by the teachers and their evident ambivalence about the practicalities of implementing inclusive practices. In the light of the participants' expressions of support for the principle of inclusion it is relevant to note that they also expressed contrary views, reporting that the disadvantages and barriers to inclusion were slightly greater than the advantages (see Results chapter figures 7, 8, and 9). This finding partly endorses the report by Alquraini (2012) - outlined in chapter two – who commented that Saudi teachers generally had negative perspectives, low expectations, and limited acceptance of students with disabilities. Similarly, a few years earlier Gaad and Khan (2007) had reported the indifference of many teachers to the principle of inclusion. While this enquiry has found some differences between the responses of the younger and the older teachers, those differences should not be exaggerated because there was considerable overall agreement between the groups. Similarly, there was general consistency in the responses of the teachers who had undergone different levels of training, suggesting that their respective teacher-training had not noticeably affected (either positively or negatively) their perceptions of inclusion.

This project yielded no clear or definitive findings in respect of the attitudes of teachers to inclusion and their ages or experience. Similarly, the various correlations between age and experience on the teachers' perceptions of disadvantages, barriers, and methods of inclusion were mixed. For instance, the most experienced participants indicated that there were considerable advantages to inclusion, but at the same time they reported that there were noticeable disadvantages and barriers; this should not be seen as a contradiction but rather as recognition by experienced teachers that the issue is not clear-cut and that there are both benefits and disadvantages (Appendix tables 14, 15). These mixed responses were similar to those of a number of other researchers, some noting that experienced teachers were more positive in their views of inclusion in mainstream classrooms, others reporting that new graduates and younger teachers were more receptive to having SPLD children in their mainstream classes (Avramidis & Norwich, 2002: Rouse 2007: Konza, 2008).

This study also found that teachers who had contact with SEN children outside the school context were more likely to see advantages to inclusion (Appendix tables 22, 23). It is not entirely clear why this should be, but the interview comments suggest that teachers in contact with disabled children outside of school may be more aware of the effects of disability

in other settings. Additionally, the greater familiarity may have enabled the teachers to be more comfortable and confident in their dealings with SEN children. This awareness seems to be confirmed by the same teachers who identified and rated the barriers to inclusion as being of lesser significance.

Another finding regarding barriers to inclusion, and one which has been mentioned above, concerns mainstream teachers' unwillingness to accept students who have certain types of disability – especially severe forms of cognitive impairment and challenging behaviours. It is not appropriate here to reiterate that point except to note that here again are mainstream teachers' views that appear ambivalent and contradictory. That is, while expressing support for inclusion nevertheless their support is qualified and conditional. The contradictory nature of their views and experiences is evidenced by their comments that the children could be taught more effectively within specialist facilities – which would endorse the view that some children are best educated in special provisions (see Table 28). This finding aligns with those of other researchers; for instance, Aldabas (2015), Al-Masood and Al-Jabbar (2002), and Konza (2008) all commented that not all SPLD children benefit from inclusion in a mainstream class, teacher endorsement of inclusion being strongly determined by each child's disability. Forlin (1995) likewise found that teachers were generally accepting of having students with a mild physical disability but cautious about accepting children with a cognitive disability. But he stated that most educators believe that more severe forms of physical and cognitive impairment could not be accommodated in mainstream classes; "… *the degree of acceptance by educators for the placement of children with SEN in mainstream classes declined rapidly with a converse increase in the severity of the disability across both physical and cognitive categories, and placement should be part-time rather than full-time*" (cited in Avramidis & Norwich, 2002, p 134). It is pertinent to note that such findings support the possibility of inclusive systems with a continuum of provision. That is, teachers consider that inclusion of all in mainstream classrooms could be effective – but only up to a point, because they object to the full-time presence of all SEN children in all mainstream lessons and activities.

The mixed and contradictory findings of this survey was likewise evident in the assertion by mainstream teachers that they should not solely be responsible for the full-time teaching of the SEN girls; instead the girls should also be the shared responsibility of a special support-teacher who would be present in the classroom or nearby. Another reason cited for endorsing the presence in mainstream rooms of a specialist support teacher is that teachers

found that some SEN girls can be a distraction (or disruptive) and thus require individualised attention within the class setting, or perhaps somewhere other than in the mainstream classroom.

In respect of barriers and obstacles, yet another important finding – albeit one which emerges indirectly from this survey – is that teachers fear that the presence of SPLD children in their class might reduce the overall performance of the class and thus reflect negatively on the teacher. This emerges from the responses to one of the survey statements and are concordant with the work of Black-Hawkins *et al* (2007) who examined the tension between achievement and inclusion. That is, with standardised testing (in both primary and secondary years) teachers are increasingly being judged according to the results of their students, but the presence of SEN children may have the effect of diminishing overall class scores, which reflects adversely on the teacher. As Black-Hawkins *et al* (2007, p1) write, student *"… achievement may be reduced to performance scores in core curriculum subjects, thus disregarding achievements relating to others areas of the curriculum and aspects of children's lives".*

The tension between the ideal of inclusion of all in mainstream settings and the practicalities of implementation are apparent in the finding that inclusion may be to the detriment of both student groups because if the teacher gives personal attention to the special-needs children then the others are ignored, and the converse occurs too. This is further evidenced by the frequent references which participants made to 'groups'; that is, some teachers think of SEN children as comprising a separate entity, not part of the mainstream cohort. Indeed, this sense of separation is quite contrary to the notion of inclusion and shows that, in the minds of some teachers at least, their classes consist of two or more divisions.

While mainstream teachers expressed mixed experiences and views of the practicalities and merits of inclusion, similar varying responses were provided by the specialist teacher participants. Some reported on the social and personal benefits of inclusion but others found that certain girls demonstrate shyness and introversion, being inhibited by their inability to join all activities. Moreover, within mainstream classes bullying and teasing can occur at the hands of mainstream children, these behaviours being damaging to the SPLD children. While there may be advantages from social contact, the learning of the SPLD children can suffer because they are often ignored and bypassed by the teachers and so fail to keep-up academically. In mainstream lessons, the SPLD girls can be disadvantaged because they may be distracted, may fail to follow the topic, may be unable to hear properly, or may be unable to ask questions. Children with specific learning difficulties need a range of interesting teaching methods and

educational equipment, but it is apparent that all too often mainstream classes are conducted in the same teacher-centred manner with the result that children's interest wanes and they become easily distracted. It appears that within the pressures of the classroom teachers (both specialist and mainstream) tend to forget the SPLD students' individual learning plans – that is, the plans developed to take account of each child's particular needs.

The findings discussed here are certainly contrary to some of the writings cited in the literature review (Chapter 2). For instance, the Centre for Studies on Inclusive Education (CSIE, 2000: 1) declared that teaching staff should perceive any differences between students as an opportunity to support learning rather than as a barrier to learning – however, it was evident in this survey that some teachers regarded such comments as idealistic and unrealistic. This is similar to the observations of Erten and Savage (2012), discussed in Chapter 2, who stated that some teachers and researchers have found the concept of inclusion too idealistic and very difficult to put into practice. They note that some disabled children cannot get proper educational services in regular classrooms because it requires specialists to identify the learning requirements specific to each child who has a physical or cognitive impairment. But it seems that not all SPLD children are adequately diagnosed with the result that teachers may not know how to address the particular needs of those children

In discussing the various barriers to inclusion, the point emerges that, contrary to the ideal of inclusion of all in mainstream classrooms, some children can learn more in the resource room because the teachers can provide individualised one-on-one lessons and so are able to focus on the particular learning needs of each pupil. Furthermore, specialist teachers are more likely to employ teaching strategies relevant to the disability of each girl in order to achieve the educational aim defined in the individual educational plan.

5.3 Summary:

As discussed in Chapter 2, Mitchell (2008) and other writers argue that inclusion requires an emphasis on conditions that promote the independence and self-reliance of disabled individuals while discouraging practices that promote exclusion, dependence, and helplessness. Mitchell (2008) notes that successful implementation of inclusive education entails the creation of a single education system that meets the needs of all children. It is clear that in mainstream schools in Saudi Arabia, as in most other countries, an arrangement has emerged which is, in effect, a dual provision system: the resource room (or special-needs room as it is sometimes described) forms a 'parallel' arrangement – a place where children are sent when they cannot

be accommodated in a mainstream class. This dual provision system was confirmed by Alquraini (2012) who, using statistics from 2007-2008, reported that 88 percent of Saudi students with mild disabilities were accommodated in inclusive mainstream classroom settings: however, he said that 96 percent of students with multiple and severe disabilities and moderate-to-severe cognitive disabilities were educated in private institutions – that is, in special schools or resource rooms.

In summary, both groups of teachers surveyed for this enquiry said that there were advantages and disadvantages to inclusion of all girls in mainstream classrooms, and each of the views – both for and against – was explained and justified. While they generally agreed that SPLD children can benefit from inclusion it was clear that not all children profit socially and educationally. This finding confirms the observations of previous researchers mentioned in the literature review (Chapter 2); that is, schools in Saudi Arabia have readily implemented integration but have experienced difficulty achieving inclusion, for as Elshabrawy and Hassanein (2014) explained, inclusion is more than just a placement, it is a full process that involves identification, removal of barriers, participation, collaboration, and achievement of all students. In this survey questionnaire, many mainstream teachers said that the SPLD girls were supported in their learning by the resource room, and most of the interviewees agreed, stating that the facilities, small classes, and individualised attention by trained specialists provided a setting more conducive to effective learning. But in the course of interviews the view was expressed that despite its merits there were also negative effects experienced by children attending the resource room insofar as it implied exclusion from the mainstream classroom.

5.3.1 Teacher-training:

Inclusion starts with teachers. As so often mentioned in other studies, providing teachers with the skills and knowledge to work with SPLD children is one key to inclusion – however it does not appear to be a panacea and does not resolve all issues. The findings of this project show that training may provide teachers with elevated confidence to work with SPLD children but still their belief in the efficacy of inclusion was qualified. The teachers who had been trained to work with disabled children perceived advantages to inclusion – though those advantages were more concerned with the social than the educational benefits. However, despite their training the respondents still identified various disadvantages, and barriers. In this investigation training in SEN techniques had a noticeable effect on the way participants rated the advantages of inclusion; those who had received training were more positive in their view

of the benefits of inclusion compared with those who did not have training. The converse of this also applied to the perceived disadvantages, those without SEN training rating the disadvantages more highly than did the SEN-trained teachers. This finding supports the view of the writers cited in Chapter 2 - and the very many other writers who have examined this issue in recent decades - that training provides a more positive outlook, and perhaps a broader field of vision (eg. Avramidis & Norwich, 2002; Pijl, 2010; Symeonidou & Phtiaka, 2009; Thornton & Underwood, 2013; McHatton & Parker, 2013).

Despite the training they had received, many teachers stated emphatically that their willingness to teach SPLD children was conditional on the children's particular disability. Although the participating SPLD teachers were willing and prepared to work with all children with special leaning needs (after all, they had chosen as a career to work with such children), many mainstream teachers stated that they were unprepared, and reluctant, to deal with some types of disability. They expressed confidence in teaching children who had physical disabilities but were unprepared to teach children with cognitive impairments. This is a telling comment because most had achieved at least bachelor-level qualifications and had completed various pre- and in-service courses for teaching SPLD children. It is not clear why they expressed such views, but it appears that many teachers found it too difficult to teach simultaneously at different levels to children with different abilities. It was not clear from the comments of the participants whether their training had been adequate or appropriate, or whether training courses might need to be altered to meet these situations. Rouse (2007) made the telling comment that despite the many pre-and in-service courses available to teachers, inclusion is a noble principle but teachers do not know how to implement it. This was resonant of the earlier work of Australian writers Center and Ward (1987) who found that many mainstream teachers (who were unsympathetic to inclusion) lacked confidence in their own instructional skills. They were positive about including only those children whose disabling characteristics were not likely to require extra instructional or management skills on the part of the teacher.

The finding of this study (and echoed in other surveys) was that teachers have a preference for inclusion of children with a mild physical disability in the mainstream classroom rather than those with a cognitive impairment, and mainstream teachers tend to deal with the presence of SPLD students by ignoring them and by focussing on delivering the topic.

Moreover, mainstream teachers often lack the time to individually help each child regardless of the need.

The inability of mainstream teachers to give attention to each child is also linked to the issues of class sizes and the rigid demands of the curriculum. These are perennial constraints for all teachers and beyond the scope of this investigation, however many schools seek to address these matters by providing some degree of flexibility.

Before addressing the research questions, it is pertinent at this point to discuss the strategies suggested by the teachers for enhancing inclusive practices. These are analysed in detail in Table 33, but it should be noted briefly here that the strongest recommendation was for mainstream teachers to have more direct experience with girls with disabilities. This finding is important because it reaffirms the value of training and experience. That is, greater experience can yield greater confidence. This finding was echoed in other suggestions that teachers should have the opportunity to observe other teachers in inclusive settings, regularly attend in-service training/workshops, and have consultation activities with other teachers, specialists and parents. The opportunity to learn from other experienced teachers is perceived to be a most important avenue to greater inclusion.

The positive influences stemming from increased exposure to classes with SPLD children is evidenced by experienced specialist teachers who are more supportive of inclusion. Possibly because of their familiarity with, and closeness to, their students, trained SPLD teachers showed significantly higher support for the advantages than did the mainstream teachers. As might be expected, the corollary of this was that the data recorded a significant difference when considering the disadvantages; mainstream teachers generally expressed agreement with the disadvantages and barriers, though there were no significant differences between the two groups when considering methods for improving inclusive practices.

A final point central to the issue of inclusion concerns the presence of resource room within the grounds of mainstream schools. On the one hand, the rooms offer SPLD girls the opportunity to learn things that they might otherwise not acquire in mainstream classes. However, attendance at the rooms may make the girls targets for bullying. Equally important, the very presence of such rooms is at odds with the principle and philosophy of inclusion for all in mainstream classrooms. The rooms are, at least in the minds of the participants, no different from the former practice of sending SPLD children away to special schools; the rooms, like the schools, are places of separation and isolation.

5.4 Responses to Research Questions:

Chapter 1 outlined the background to the problem which this the study sought to address, three questions then being posed. The general over-arching research question was as follows:

What are the views and attitudes of both the female teachers who were trained to support students with specific learning difficulties and the mainstream female teachers with regard to the inclusion of children with special educational needs in mainstream schools in Riyadh?

The specific research questions are:

- What are the attitudes and views of teachers to inclusion?
- Based on the experiences and views of teachers, what are the advantages and disadvantages of inclusion, and what are the barriers to full inclusion?
- What are the experiences and views of teachers regarding the advantages and disadvantages for children with special educational needs of being in the resource room and/or the mainstream class?

In the light of the findings of the survey questionnaire and the interviews the following responses have emerged.

5.4.1 Question 1.

What are the attitudes and views of teachers to inclusion?

The participants did not provide a single definitive or united view of inclusion; there was neither overwhelming support for, nor rejection of, the policy and practice of inclusion, and teachers' attitudes were diverse, seemingly inconsistent - even contradictory. While all respondents expressed strong endorsement of the philosophy and principle of inclusion, nevertheless many expressed considerable concerns about the practicalities of teaching classes which comprise both typically-developing students and those with special needs. While acknowledging the benefits of inclusion to some SEN children the teachers nevertheless tempered their support by referring to the obstacles to full inclusion in mainstream settings and to the numerous practical difficulties which they experience when teaching mainstream and SPLD children at the same time.

There seems to be a disjunction between the policy and the practice, between the ideal of inclusion and the realities of classroom teaching. In particular, teachers found it very challenging when children with cognitive or specific learning difficulties were present in a mainstream class, proportionally more time having to be devoted to assisting the SEN students. While many teachers endorsed the principle of inclusion, their level of support was strongly dependent on the nature of the disability, on the classroom setting, and the work to be undertaken. This finding has been reported in a number of previous works: for example, Fredrickson and Cline (2002) and Ford (2013), among others, have agreed that despite the ideal goal of full and complete inclusion in mainstream classes there is a practical limit to the capacity of mainstream teachers to fully include all children in all activities. Just what limit might be is beyond definition, but it refers particularly to the most serious instances of physical and cognitive impairment.

5.4.2 Question 2.

Based on the experiences and views of teachers, what are the advantages and disadvantages of inclusion, and what are the barriers to full inclusion?

As stressed many times in this thesis, the advantages and disadvantages, the benefits and shortcomings of inclusion depend to a large extent on the skills and attitudes of teachers – but even more importantly they are determined by the particular impairments experienced by the children. It is evident that children with mild/moderate forms of physical or cognitive impairment may benefit significantly from inclusion, but those with more severe impairments may not benefit at all. A key finding of this investigation is that teachers report quite strongly that the main advantages are social and personal, not educational. The main advantages for the girls stem from their contact with others, and especially with their non-impaired peers. Those with mild impairments enjoy the company of other girls and (if possible) are able to join outdoor games and sports, and within the class settings they may participate in group activities. By expanding their social interactions some girls enjoy heightened self-esteem and personal confidence. However, as regards their formal lessons on the subjects specified by the curriculum, depending on the particular impairment the advantages may be limited; in some cases, they may not benefit at all if the teacher has to devote most of her time focussing on the mainstream students, thus leaving little time to assist those with special needs.

It has been stated several times in this project that teachers expressed mixed and apparently ambiguous views of inclusion. Even the most experienced participants described

the considerable advantages that can accrue to some children who attend inclusive classes, but at the same time those teachers stated that they encountered noticeable disadvantages and barriers; this should not be seen as a flaw in either the policy or the practice; rather it is a recognition by experienced teachers that the issue is not clear-cut and that there are both benefits and disadvantages. That is, some children will enjoy benefits but others will not.

There are several disadvantages, the main one being the negative effects on the educational progress of SEN students. The girls might feel inhibited; they might experience teasing and bullying from the mainstream children; they might receive relatively little personal attention from the teacher and thus fall behind academically; and their presence could be a cause of distraction to others. Indeed, it was noted that children with more severe forms of behavioural or cognitive impairment could, on occasion, be seriously disruptive. In a mixed-ability inclusive class the individual needs of girls with disabilities may not be addressed adequately by the mainstream teacher: the teacher may even bypass or ignore the SEN children with the result that the students fail to learn the necessary lessons and thus not progress. Girls with special needs usually require significantly more teacher-directed attention than those of typically-developing girls, but for various reasons that attention may not be provided. The lack of personal assistance given to SEN children may be due to the demands of the curriculum, the pressure of the daily timetable, the size of the class, the facilities and setting, the teacher's ignorance of the specific needs of each SEN child, or the inadequate knowledge and skills of the teacher. Other disadvantages are social and personal; as noted above, some SEN students profit personally from the company of mainstream peers, but this is not always so because some may feel intimidated or ashamed, others may experience teasing or bullying, and still others may be unable to communicate or interact in any meaningful way with the mainstream girls.

Some participants explained that, to date, Saudi methods of mainstream instruction have remained largely teacher-centred with the result that children's interest can wane. Additionally, SEN students can feel bored, disappointed, and deserted by the class teachers. All students, including those with specific learning difficulties, need a range of interesting teaching methods and educational equipment. This highlights the need for training that includes methods of teaching and learning which are varied, stimulating, challenging, and which engage the children.

The various disadvantages to inclusion are also associated with the barriers. A finding here is that there are educational, attitudinal and physical barriers to the implementation of fully inclusive practices. The main educational barrier is outlined in the above paragraph and concerns the practicalities of teaching both mainstream and SEN children concurrently. Most participants in this study reported on the many difficulties of conducting inclusive practices and the impossibility of including children with more severe disabilities in mainstream classes. Stemming from their experiences most voiced negative views, low expectations, and adverse attitudes to inclusion, and this negativity is a serious obstacle to the policy ever being implemented. If the teachers themselves are averse, even hostile, to the system then it is unlikely to ever be achieved. Indeed, in this survey the disadvantages and barriers to inclusion were rated as being slightly greater than the advantages.

A central tenet of the policy of inclusion is that it is the system which must change so as to accommodate the needs of SEN children because the children cannot be expected to adapt to the rigors and practices of the prevailing system. Such changes entail teachers being trained to work with special-needs students, school facilities being modified, and perhaps the curriculum being adjusted too. While most participant teachers had received some training in inclusive practices many still expressed lack of confidence about their own abilities in working with SEN children, and that lack of confidence was linked to their negative views of the overall philosophy of inclusion.

The respective advantages and disadvantages of inclusion place the focus on the teacher rather than the student, because it is the teacher who is responsible for making inclusion 'work'. As detailed in the literature review above, in recent decades particular attention has been given to the training of teachers so that true inclusion (as distinct from partial inclusion) can be achieved, and many studies have highlighted the need to equip teachers and to foster positive attitudes among teachers. These measures have met with mixed results, though most studies assert that training is still the key. Black-Hawkins *et al*. (2007, p 13) added another perspective when they stressed the value of all relationships: "*Evidence ... suggested that, above all, relationships – amongst students, amongst staff and between staff and students - are at the heart of understanding and developing inclusion and achievement. This is not to promote a naïve, sentimental approach to education, in which expectations about students and staff are suppressed, but to acknowledge that teaching and learning take place within the context of human relationships."*

5.4.3 Question 3.

What are the experiences and views of teachers regarding the advantages and disadvantages for children with SPLD of being in the resource room and/or the mainstream class?

When appraising the advantages and disadvantages, the merits and demerits of inclusion the issue arises as to how SEN children should be educated if they cannot effectively be accommodated within mainstream settings. Much of this enquiry has focused on the alternative – the resources room. The role and function of that room, and the place it has within the context of a policy of inclusion, are addressed here.

A major conclusion of this investigation is that most teachers consider that some SEN children could be taught, for at least for some topics and some of the time, in specially designated resource rooms located within the precinct of the mainstream school. It is evident that teachers' preference for the use of resource rooms stemmed not from any resistance to the notion of inclusion but from the practicalities and difficulties that arise when some SEN children are present in their classrooms. In particular, the difficulty of teaching children with special needs who require close attention and extra assistance while simultaneously trying to teach a fixed curriculum and manage a class of mainstream children.

In general, teachers endorsed the presence of resource rooms, though there were different views as to how and when the rooms should be used. Some viewed the very existence of such rooms as a partial reversion to the time when SEN children were excluded from the mainstream and instead were sent to 'special' schools, and in that sense the rooms seem to be contrary to the notion of full inclusion. Others accepted that the resource rooms constitute a necessary component in the broad range of support services – the continuum of in-class, on-campus, and off-campus provisions – that are required for to make inclusion work. Although none of the participants expressed total rejection of the principal of inclusion it was clear that most had some reservations, believing that many SEN children could be better taught in a mainstream class on a part-time basis; that is, sometimes in-class and sometimes away from mainstream settings.

It was evident that some considered the resource room as a complementary setting or 'back-up', as a place where children could receive the attention which they could not receive in the mainstream room. Also, a number of teachers viewed the resource room as a place which would provide them (the teachers) with respite from

teaching special-needs children full time. As noted, some teachers gave qualified support for inclusion of all girls in mainstream classes – but they tempered their support in the expectation that they would have SEN children in the classes for only a part of the time, the rest of the time the girls would be in the resource room. In effect, the teachers were saying that they would endorse part-time inclusion, but not inclusion on a full-time basis. As has been discussed above, this notion of part-time inclusion must be seen as within the context of a spectrum of options available for the education of SEN children, and many writers still consider it to be compatible with the broad spirit of inclusion.

Teachers consider the resource room as advantageous to both SEN children and mainstream children. When used selectively and on a part-time basis it may provide SEN children with the opportunity to learn those things which they might not be able to acquire in the busy and demanding setting of a mainstream class; and it enables mainstream children to receive the attention which they might not otherwise receive. The proportion of time which a child might spend in a mainstream room would, said the participants, depend on the nature of the child's impairment, but for many mainstream teachers there was an expectation that children's attendance in their classes would only be part-time – or that a support teacher would be present to assist the SEN girls.

While teachers generally indicated a willingness to include some physically disabled children in mainstream classes it was with the proviso that those children would receive in-class assistance, and this individualised attention was viewed as an alternative to the children attending the resource room. Participants generally considered that a special class located within a mainstream school is the most effective way of teaching children with visual impairment, hearing impairment, and intellectual disabilities. Special facilities were felt to be best for children with challenging behaviour, intellectual disabilities and severe autism.

5.5 Implications for practice:

This work has focussed on the work of teachers, and it is evident that they have had both positive and negative experiences and they expressed a wide variety of views. Inclusion is an ideal, a principle which is noble in purpose but extremely difficult to implement as intended. The comments and experiences of the participants show that there are many variables which determine the effectiveness of inclusion. These variables include the nature and extent of children's physical or cognitive impairment, the educational work to be

undertaken (i.e. the curriculum), the training of the teachers, the collaboration between the teachers, and the classroom settings.

The findings of this study have a number of important ramifications regarding the implementation of the policy of inclusion. Teachers identified several opportunities for improvement, and the measures most commonly cited focused on the teachers themselves, the view being expressed that teachers required more training (both pre-service and in-service) and more contact with SEN children outside of formal teaching hours and in other settings. To date, training (at least for mainstream teachers) in regard to the teaching of SEN children has tended to be rather general in nature, but training might need to be more intensive and targeted by providing specific, practical teaching strategies for use with children who have particular forms of impairment Examples would be techniques for working with children who have some level of physical disability (such a deafness) or for teaching children with mild cognitive impairments. Another area for improvement concerned the practicalities of classroom conditions and lesson management - in particular, the requirement for suitable facilities, equipment, and instructional materials.

A further implication concerns the role and status of the resource room. It is strongly suggested that efforts be made to change the image of the resource room so that it is not viewed as a place to dispatch the more disabled children. In the eyes of many mainstream teachers it is a place to send unwanted students, and as such it has low status and is poorly regarded. This image needs to change so that it is viewed as a respected place, integral to the entire school, and staffed by highly-skilled teachers who complement the work being done by the mainstream teachers. There was no evidence from this survey as to the extent of collaboration between teachers, but it would be important that they should complement each other in all aspects of their work. Moreover, it would be useful if the teachers worked in tandem (as happens in some Australian schools): that is, while one teaches the other attends to those who have special needs, and at other times the roles are reversed.

In order to enhance the process of inclusion the participants mentioned the need for teachers to have more time to complete their work: that is, the opportunity for teachers to give more personal and individualised assistance to SEN children. Another often-cited area for improvement was the need for more in-service training on specific aspects of teaching methodologies and classroom management. Some described how the training they had undertaken had still not equipped them to deal adequately with various unexpected and unfamiliar situations they encountered. It should be recorded that teachers did not express negative comments about school administration, yet many writers, such as Black-Hawkins *et*

al (2007) and Florian (2007), argue that senior administrators are the key because they establish the school's 'ethos' of inclusion.

Another implication which emerges from this work is that mainstream classrooms may need to be better equipped with learning aids, though it seems unlikely that each room could be equipped with facilities that meet all of the needs of all children. There is also the related issue of class sizes, for if, as some participants have commented, teachers do not have the opportunity to provide individualised assistance to children with special needs, then smaller classes might be appropriate.

5.5.1 School Management

It is the State that sets national policies, such as inclusion, but whether governments and their agencies should be responsible for the implementation is a moot point. Political practices vary between countries and ideologies, some arguing that the state should merely have general oversight of schools (including public and private, inclusive and exclusive), others questioning whether governments are required to be active in promoting a specific education model (Acedo et al, 2009). Another issue, which emerged indirectly and which needs to be examined in other research, concerns the role of school management in facilitating and leading the process of inclusion, though this matter was not the objective of this research. This project did not explore the roles of principals or other school managers in regard to the implementation of inclusive practices, so it is not possible here to make any conclusions about their influence on teachers' attitudes or on the extent of inclusion. Nevertheless, they are equally important to the entire process for it is they who allocate physical and staff resources, and it is they who have oversight of teacher training and the maintenance of appropriate professional standards. However, it is not evident from this research just how far principals in the schools being surveyed have directly influenced teachers' attitudes and teaching practices.

A detailed discussion of the roles of school principals/managers is beyond the scope of this project, but various writers have asserted that management is of prime importance because it is they who have supervision of the work of teachers, and it is they who establish the moral and ethical principles and the pedagogical standards that guide the school. Riehl (2017) stated that administrators have several key tasks; fostering an understanding of inclusivity and all that it entails; promoting a culture of inclusivity within the school; assisting and encouraging teachers to adopt inclusive practices; and building relationships between schools and communities. All of these issues became apparent in this study, and as noted teachers need to

be equipped with the skills to work with a class of diverse children. So too the relationships between schools and families is integral to children feeling that they are a part of a school community. As outlined above, the concept of inclusion being a continuum of provisions involves parents and family members. Inclusion does not start and end at the school gate; families and the wider community need to be involved (for further discussion see Miles and Singhal, 2009).

5.6 Summary:

In summary, the policy of inclusion in mainstream classrooms for all is being implemented in elementary schools in Saudi Arabia, but the evidence from this enquiry shows that full inclusion has not yet been achieved. In general, teachers endorse the philosophy of inclusion, but they find that, in practice, it is very difficult to apply as originally intended by policy-makers and legislators. Teachers express support for the use of resource rooms which can provide individualised assistance to children with particular learning needs, and many teachers regard the resource room as an essential back-up. Another finding here is that many teachers perceive inclusion in mainstream classes as being a part-time arrangement, children spending some time attending mainstream classes and some of their time in the resource room. It is clear that teachers readily accept the presence in mainstream classes of children with milder forms of physical and cognitive disability, but they reject the notion that all children (and especially those with severe impairments) should attend all mainstream classes full-time.

Chapter 6: Conclusion

CONCLUSION

This research project examined the policy and practice of inclusion in primary schools for girls in Saudi Arabia. The focus was on the experiences and ideas of teachers because they are the ones responsible for implementing the policy; the success or otherwise of inclusion depends largely on the skills of mainstream teachers and their willingness to fully include children with physical or cognitive impairments in their classes. In particular this study sought to determine their attitudes and to identify the factors that shaped those attitudes. A specific feature of this enquiry was the role of the resource rooms which are, in many schools, located within the precincts of mainstream schools and which provide learning assistance for SPLD children by specialist teachers. In order to provide a framework for the examination of the subject of inclusion the philosophical basis was detailed and several research questions were posed, those questions exploring the functions and the advantages and disadvantages of the resource rooms.

The contribution which this study makes is that it examines a new and important aspect of the Saudi educational system. Inclusion is a prominent and far-reaching policy, having serious practical implications for the learning experiences of all children. To date there have been relatively few enquiries into the implementation of the policy of inclusion in Saudi Arabia, and no detailed studies of inclusion in girls' schools, yet inclusion is now a key daily feature of the classroom experiences of all Saudi children and teachers. The findings of this work have significant implications for school administrators, for educational policy-makers, for teacher-trainers, and indeed for teachers themselves.

A major conclusion from this enquiry is that inclusion has not been achieved. Girls with physical or cognitive impairments are being integrated into mainstream classes – but full inclusion has not yet been accomplished in all classroom situations. There are several possible explanations for this: first, the policy is relatively new and so many mainstream teachers have had limited experience of working with SPLD children. Second, the policy and its implications are not fully comprehended by all teachers. Third, to date the training of teachers has not always been adequate; inclusion is both an objective and a process, and teachers need to be equipped with the competencies to apply inclusive methods. A fourth explanation emerges from the experiences and attitudes of the teachers who were surveyed and it concerns the practicalities of including children who may exhibit a very wide range of impairments. It is apparent that there is a disjunction between the philosophy and the implementation of inclusion. That is, the principle and policy are noble and desirable, the philosophy of inclusion being endorsed by

teachers, but in practice it is difficult to implement. The teachers who contributed to this study (most of whom were quite experienced) voiced strong support for the ideal of inclusion, nevertheless many expressed considerable concern about the practicalities of teaching classes which comprise both typically-developing students and those with special needs.

6.1 Continuum of Provision

As discussed in the literature review above (see p 24), inclusion has been interpreted differently in different countries, and from this has emerged the notion of a continuum of provision – that is, a range of complementary forms of inclusive learning. It is not a matter of full inclusion in a mainstream class or, alternatively, full exclusion in a special school. Instead there needs to be a range of options available to meet the specific requirements of each child. In the Saudi system many mainstream schools have been furnished with specialist resource rooms, and the responses that emerged from this survey provide evidence that teachers strongly endorse the formation of a spectrum of educational services, though they did not specify just what form those services should take or how children would be allocated. The lack of full inclusion in Saudi schools, and the seeming dichotomy between the principle and practice, leads to the teachers' support for the continuance of specialist resource rooms within school campuses. It was found here that mainstream teachers were insistent that they need support from specialist teachers; when working alone teachers cannot address the learning needs of all their students who may exhibit different types of impairment. The point was made strongly that while mainstream teachers acknowledge the need to develop their own classroom skills to ensure inclusion they also require assistance from specialist support teachers.

A clear conclusion is that special-needs services should continue to be provided, the services functioning in conjunction with mainstream classes. The services could take many forms of off-campus, on-campus, and in-class assistance – or more likely a combination of these. For instance, assistance could be in the form of specialist support-teachers working within the mainstream room (and in tandem with the mainstream teacher) where they give personalised one-on-one assistance to SPLD children. The support could also be in the form of an on-campus resource room in which specialists assist individual SPLD children. But the expectation is that the assistance would be provided for some subjects and for a part of each day – but not full time because the children should have continuing interactions with their peers. The participants argued that SPLD children benefit most when they have ready access both to special-needs facilities and specialist teachers and also to mainstream schools and

mainstream peers. They benefit educationally from the personalised instruction provided by the specialist teachers and they profit socially from their participation in the activities of the mainstream children.

An important conclusion to this work is that the resources rooms need to be integrated into the mainstream school so that they are not viewed as places apart. In general, teachers see resource rooms as indispensable elements of inclusion. Within the context of mainstream schools, the resource rooms and the presence of specialist teachers are considered to be integral to the teaching process, and as detailed above, they should form part of a 'mixed-model of provision'. While acknowledging the need for specialist support services in one form or another, the resource rooms should not have perceived as separate entities, as places within the school but not a part of the school. Instead the rooms need to be viewed as supplementing and complementing the work done in mainstream classes. It is evident that many participants viewed resource rooms as places where children could obtain extra support in their learning. Nevertheless, while some teachers certainly held that view, others showed (albeit indirectly) that they considered the resource rooms as alternatives, as places where they could despatch their most difficult students. The presence of a resource room staffed by specialists is no longer perceived as being at odds with the notion of inclusion. Rather, it is considered as one element among a range of services that need to be offered.

The extent to which SPLD children can be fully included, or otherwise allocated to the resource room, is dependent on the nature and severity of their impairment – and this was an important point stressed by all teachers. The links between professional background and teachers' attitudes to inclusion are not clear-cut, but an important conclusion here is that the nature of children's' impairments are more important determinants of teacher attitudes than the teachers' own background and training. That is, the attitudes of teachers tend to be influenced more by the nature of each child's particular condition rather than by teacher-related factors such as age or training.

There is no single approach to inclusion because the variety of disabilities is beyond simple definition. Teachers recognise that children with some physical disabilities and those with relatively mild forms of physical impairment can readily benefit from inclusion; however, others (such as those with severely diminished cognitive function or disruptive behaviours) might not. Based on their experiences teachers have strong views about which students can be accommodated readily in mainstream classes and which needed to be taught in other settings,

but for the most part they insist that children with severe disabilities cannot effectively be taught in mainstream settings. Moreover, such children might obstruct the learning of other students and even disrupt the functioning of the class.

In the light of the teachers' expressions of support for the principle of inclusion a relevant finding of this work is that the teachers identified strong (and seemingly conflicting) experiences regarding the respective advantages and disadvantages of inclusion. Indeed, a conclusion of this work is that there are equally compelling advantages and disadvantages to inclusion. Teachers described mixed views and experiences regarding the practicalities and merits of inclusion: some reported on the social and personal benefits of inclusion and interaction but others found that certain girls demonstrate shyness and introversion, being inhibited by their inability to join all activities. Within mainstream classes some SPLD children are able to achieve advantages by learning from the others girls; but conversely bullying and teasing can occur at the hands of mainstream children, these behaviours being damaging to the SPLD students. While there may be advantages from social contact, the learning of the SPLD children can suffer because they are often ignored and bypassed by the teachers and so fail to keep-up academically. In mainstream lessons, the SPLD girls can be disadvantaged because they may be distracted, may fail to follow the topic, may be unable to hear properly, or may be unable to ask questions. It is apparent that (in the surveyed schools at least) mainstream classes are often conducted in the same teacher-centred manner with the result that the interest of SPLD students wanes and they become easily distracted. It appears that in the pressures of the classroom, teachers (both specialist and mainstream) tend to forget or neglect the SPLD students' individual learning plans – that is, the plans developed to take account of each child's particular needs. It is evident that some SPLD children cannot obtain suitable educational services in regular classrooms because it requires specialists to identify the learning requirements specific to each child who has a physical or cognitive impairment. But it seems that not all SPLD children are adequately diagnosed with the result that teachers may not know how to address the particular needs of those children.

The various scenarios described above highlight the need for a continuum of provision; that is, a range of inter-related collaborative services which together cater for the needs of SEN children.

Another conclusion from this enquiry concerns the strategies which might be adopted to improve the implementation of inclusion. This work has focused on the role of teachers in

the process, and the measures most commonly cited for enhancing inclusion focused on their training. The link between teachers' training and their use of inclusive practices was not entirely clear, nevertheless it is evident that teachers required more training (both pre-service and in-service) on the techniques which can be used to foster inclusion. It is apparent, too, that experience breeds confidence, more experienced and better-trained teachers being capable of dealing with situations as they arise.

Another significant and far-reaching conclusion concerns teachers' attitude. This study examined teachers' views of inclusion, those attitudes being mixed and sometimes inconsistent - supportive though hostile, positive yet critical. Attitudes and beliefs are not easily changed, nevertheless improved training, plus on-going exposure to new approaches to teaching, might also have the benefit to fostering more positive attitudes. Training and attitudinal changes might also help eliminate the idea that resource rooms are somehow separate. The successful implementation of inclusive education entails the creation of a single education system that meets the needs of all children, but it emerged in this survey that some teachers view schools as having a dual system: the resource room is regarded by some teachers as constituting a 'parallel' arrangement – a place which students attend when they cannot be accommodated in a mainstream class. Attitudinal change on this point must be achieved if the resource room is to be considered as an integral and normal part of each educational setting.

A final strategy for elevating the level of inclusivity involves the use of individualised educational plans, and these too should be seen as a component of the continuum of educational services. The plans were not a specific feature of this investigation but it is clear that the use of plans by mainstream teachers was minimal. It seems that the plans, if they exist at all, are often neglected or ignored. The plans are based on psychological assessments and describe both the features of the child's impairment and the best methods for teaching the child. Consequently, if a teacher is unaware of the child's particular condition then the teacher is unable to adopt suitable teaching practices. The use of plans to guide teachers should, it is suggested, be incorporated into any future training courses.

In summary, inclusion is a principled philosophy, a noble policy, but in educational settings it is an ideal that is difficult to implement. It requires an emphasis on conditions that promote the independence and self-reliance of impaired individuals while discouraging practices that promote exclusion, dependence, and helplessness. The effective implementation of inclusive education entails the creation of a single educational system that meets the needs

of all children, but it is evident that in Saudi Arabia, as in many other countries, full inclusion has not yet been attained. Teachers are charged with the task of applying inclusive practices, so if the level of inclusion is to be elevated then efforts must be made to provide teachers with the skills, knowledge, and self-confidence to include all children in their daily classroom activities. Additionally, it is evident from this investigation that no single strategy can provide inclusion; rather, inclusive practices involve a range (or continuum) of complementary services which should meet the needs of the very wide range of children who have impairments.

6.2 Significance of this study:

This research project adds significantly to the understanding of the many issues associated with the policy and practice of inclusion. In Saudi Arabia, as in many other countries, inclusion is a relatively new aspect of schooling and so there a number of key matters that need to be refined and improved if inclusion is ever to be achieved. This study is unique because to date there have been few examinations of inclusive practices in the context of the Saudi school system, and no detailed study of the work of teachers in girls' school. This project included several hundred teachers from many schools in the city of Riyadh, and it is suggested that the findings discussed above may be considered as being fairly representative of the experiences of teachers in other parts of the country too. The value of this research is that it addresses several key questions about inclusion and identifies a number of important matters that need to be considered if inclusive practices are to be implemented.

Finally, the findings of this study and the various issues summarised in the conclusion should be taken into account by educational administrators and senior policy-makers otherwise inclusion will remain as just a policy and a noble ideal – but one without substance.

6.3 Future Directions:

Many associated issues have arisen in the course of this project, and they could usefully form the basis of future enquiries. The following are a few subjects worthy of further study:

6.3.1 Inclusive practices.

It would be of practical value for a close and detailed study of the classroom practices which could be used to ensure that children with impairments are better included.

6.3.2 Teaching Assistants:

In several countries, such as Australia, teaching assistants attend some inclusive classes and work closely on a one-to-one basis with SEN students who need additional support. This approach could be explored in more detail with a view to implementing it in other settings.

6.3.3 Curriculum, facilities, and class sizes.

Class sizes, the demands of the curriculum, and facilities are perennial constraints for all teachers. Students with particular impairments require facilities and equipment which will enable them to perform the same (or equivalent) activities as their peers. It would be useful if the specific needs of children with different impairments could be examined and identified. Similarly, it would be beneficial if the curriculum (all subjects and all levels) could be reviewed for the purpose of ensuring that subjects and topics can be taught in ways that do not exclude any students.

6.3.4 Individualised learning plans.

If teachers are to include children with impairments then they need to know precisely the condition experienced by each student. If a teacher understands a child's situation then he/she is more likely to be able work effectively with that child. It would be very helpful if work could be conducted which would ultimately lead to the greater use of plans by mainstream teachers.

6.3.5 School Management and Inclusion

Finally, it should be noted that this project did not enquire into the work of school principals or of others charged with the task of overseeing school operations – but their attitudes and experiences are also important if inclusion is ever to be fully achieved. Their roles are crucial; inclusion cannot occur if those in authority do not fully subscribe to the philosophy or if they fail to make adequate provision for children with special needs. Despite inclusion being mandated by the Ministry of Education it is unclear what additional funding has been allocated to each school to enable it to provide a resource room staffed with specialist teachers. Nor is it evident the extent to which teachers – both trainee and experienced - are being provided with the appropriate skills to enable them to work with SEN children. As shown, professional training is a key point of concern if inclusive practices are to be implemented, and it is essential that school management recognise the importance of on-going skills improvement by both mainstream and specialist staff.

Final Thoughts

In Saudi Arabia inclusion has not yet been fully implemented, and among teachers there is some ambivalence about the process. Inclusion is both an objective and a process, but discussion of the issue continues, there being disparate views and lingering questions about various aspects of the philosophy and practices of implementation.

Writers such as Acedo, Ferrer, and Pàmies (2009) outline the many questions that still need to be considered: how to change community attitudes? What about the roles of parents, governments, and communities? How to adapt teaching methods to students' needs? Can inclusion ever be applied to all children? Can inclusion be assessed or measured? There may never be full consensus on these matters, but they need to be addressed.

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Appendices:

Table 1: descriptive statistics of disabilities and preferred setting for educating SEN children

		Home	Residential Care	Special school	Special class in MS	Inclusion and out-class support	Inclusion and in-class support
Visual impairment	N	6	11	50	66	34	42
	%	2.9%	5.3%	23.9%	31.6%	16.3%	20.1%
Hearing impairment	N	6	10	48	70	33	42
	%	2.9%	4.8%	23.0%	33.5%	15.8%	20.1%
Physical disability	N	5	19	33	39	32	81
	%	2.4%	9.1%	15.8%	18.7%	15.3%	38.8%
Intellectual disability	N	7	25	75	70	20	12
	%	3.3%	12.0%	35.9%	33.5%	9.6%	5.7%
Challenging behaviour	N	6	15	56	45	43	44
	%	2.9%	7.2%	26.8%	21.5%	20.6%	21.1%
Learning difficulties	N	7	7	15	28	113	39
	%	3.3%	3.3%	7.2%	13.4%	54.1%	18.7%
Autism	N	5	22	85	58	22	17
	%	2.4%	10.5%	40.7%	27.8%	10.5%	8.1%

Table 2: descriptive statistics for the advantages for SEN students of inclusion in mainstream classes

		S. D	D.	Un.	A.	S. A	M	SD	R
Girls with special needs have the right to be educated in the same classroom as typically developing girls	N	5	26	23	78	77	3.93	1.09	11
	%	2.4%	12.4%	11.0%	37.3%	36.8%			
Girls with special educational needs should be given every opportunity to function in an integrated classroom	N	2	10	16	73	108	4.31	0.88	2
	%	1.0%	4.8%	7.7%	34.9%	51.7%			
Inclusion can be beneficial for parents of girls with exceptional needs	N	2	6	32	74	95	4.21	0.87	7
	%	1.0%	2.9%	15.3%	35.4%	45.5%			
Parents of girls with exceptional needs prefer to have their child placed in an inclusive classroom setting	N	7	11	34	61	96	4.09	1.06	9
	%	3.3%	5.3%	16.3%	29.2%	45.9%			
Most girls with exceptional needs are well behaved in integrated education classrooms	N	3	8	30	85	83	4.13	0.89	8
	%	1.4%	3.8%	14.4%	40.7%	39.7%			
Inclusion is socially advantageous for girls with special needs	N	3	6	13	74	113	4.37	0.84	1
	%	1.4%	2.9%	6.2%	35.4%	54.1%			
The presence of girls with exceptional educational needs promotes acceptance of individual differences on the part of typically developing girls.	N	1	7	19	88	94	4.27	0.80	4
	%	.5%	3.3%	9.1%	42.1%	45.0%			
	N	3	1	25	99	81	4.21	0.78	7

Inclusion promotes social independence among girls with special needs	%	1.4%	.5%	12.0%	47.4%	38.8%			
Inclusion promotes self-esteem among girls with special needs	N	1	4	30	85	89	4.22	0.79	6
	%	.5%	1.9%	14.4%	40.7%	42.6%			
Girls with exceptional needs are likely to exhibit more challenging behaviours in an integrated classroom setting	N	2	9	44	88	66	3.99	0.88	10
	%	1.0%	4.3%	21.1%	42.1%	31.6%			
Girls with special needs in inclusive classrooms develop a better self-concept than in a self-contained classroom	N	5	15	52	80	57	3.80	0.99	12
	%	2.4%	7.2%	24.9%	38.3%	27.3%			
The challenge of a mainstream education classroom promotes academic growth among girls with exceptional educational needs	N	3	13	55	90	48	3.79	0.91	13
	%	1.4%	6.2%	26.3%	43.1%	23.0%			
Typically-developing girls in inclusive classrooms are more likely to exhibit challenging behaviours learned from girls with special needs	N	2	3	17	108	79	4.23	0.74	5
	%	1.0%	1.4%	8.1%	51.7%	37.8%			
A good approach to managing inclusive classrooms is to have a special education teacher be responsible for instructing the girls with special needs	N	3	10	16	73	107	4.29	0.90	3
	%	1.4%	4.8%	7.7%	34.9%	51.2%			

Table 3: descriptive statistics for the disadvantages for SEN students of attending a mainstream classroom

		S. D	D.	Un.	A.	S. A	M	SD	R
Inclusion does not suit the needs of typically developing girls	N	14	30	53	61	51	3.50	1.19	6
	%	6.7%	14.4%	25.4%	29.2%	24.4%			
It is difficult to maintain order in a classroom that contains a mix of girls with exceptional education needs and children with average abilities	N	11	46	37	66	49	3.45	1.21	7
	%	5.3%	22.0%	17.7%	31.6%	23.4%			
Most special education teachers lack an appropriate knowledge base to educate typically developing girls effectively	N	13	74	37	51	34	3.09	1.22	9
	%	6.2%	35.4%	17.7%	24.4%	16.3%			
The individual needs of girls with disabilities CANNOT be addressed adequately by a mainstream education teacher	N	7	10	28	68	96	4.12	1.03	1
	%	3.3%	4.8%	13.4%	32.5%	45.9%			
Girls with special needs will probably develop academic skills more rapidly in a special, separate classroom than in an integrated classroom. And positive	N	6	34	54	73	42	3.53	1.07	5
	%	2.9%	16.3%	25.8%	34.9%	20.1%			
Girls with exceptional needs are likely to be isolated by typically developing girls in inclusive classrooms	N	16	62	37	53	41	3.19	1.26	8
	%	7.7%	29.7%	17.7%	25.4%	19.6%			
	N	53	74	36	37	9	2.40	1.16	10

Isolation in a special class does NOT have a negative effect on the social and emotional development of girls prior to middle school	%	25.4%	35.4%	17.2%	17.7%	4.3%			
Girls with exceptional needs monopolize teachers' time	N	6	37	41	85	40	3.55	1.07	4
	%	2.9%	17.7%	19.6%	40.7%	19.1%			
The behaviours of girls with special needs require significantly more teacher-directed attention than those of typically developing girls	N	4	22	50	90	43	3.69	0.97	2
	%	1.9%	10.5%	23.9%	43.1%	20.6%			
Parents of girls with exceptional educational needs require more supportive services from teachers than parents of typically developing girls.	N	2	25	57	92	33	3.61	0.92	3
	%	1.0%	12.0%	27.3%	44.0%	15.8%			

Table 5: Descriptive statistics for barriers to inclusion

		S. D	D.	Un.	A.	S. A	M	SD	R
Inadequate pre-service preparation of teachers	N	6	13	16	63	111	4.24	1.02	7
	%	2.90 %	6.20 %	7.70%	30.10 %	53.10 %			
Overload on the part of teachers	N	7	15	15	65	107	4.19	1.06	9
	%	3.30 %	7.20 %	7.20%	31.10 %	51.20 %			
Classrooms do not accommodate girls with disabilities	N	6	5	15	50	133	4.43	0.93	1
	%	2.90 %	2.40 %	7.20%	23.90 %	63.60 %			
Absence of regulations that support inclusion	N	7	6	28	65	103	4.2	1	8
	%	3.30 %	2.90 %	13.40 %	31.10 %	49.30 %			
Teachers' negative attitudes	N	3	12	29	79	86	4.11	0.94	12
	%	1.40 %	5.70 %	13.90 %	37.80 %	41.10 %			

Resistance among administrators	N	7	14	49	73	66	3.84	1.04	16
	%	3.30%	6.70%	23.40%	34.90%	31.60%			
Non-acceptance by other parents	N	8	20	49	72	60	3.74	1.09	17
	%	3.80%	9.60%	23.40%	34.40%	28.70%			
Little Knowledge about special educational needs	N		5	24	65	115	4.38	0.78	4
	%		2.40%	11.50%	31.10%	55.00%			
Lack of experience regarding Inclusion	N		9	20	75	105	4.32	0.81	5
	%		4.30%	9.60%	35.90%	50.20%			
Class size or large teacher/pupil ratio	N	8	5	15	48	133	4.4	0.99	3
	%	3.80%	2.40%	7.20%	23.00%	63.60%			

Limited time for teachers to give sufficient attention to girls with SEN	N	6	10	22	78	93	4.15	0.98	10
	%	2.90%	4.80%	10.50%	37.30%	44.50%			
Lack of equipment and appropriate educational materials	N	5	8	9	59	128	4.42	0.92	2
	%	2.40%	3.80%	4.30%	28.20%	61.20%			
Non-acceptance by parents of SEN girls	N	19	31	56	48	55	3.42	1.27	19
	%	9.10%	14.80%	26.80%	23.00%	26.30%			
Behaviour management	N	4	15	27	91	72	4.01	0.96	14
	%	1.90%	7.20%	12.90%	43.50%	34.40%			
Rigidity in curriculum design and examination	N	5	16	34	71	83	4	1.04	15
	%	2.40%	7.70%	16.30%	34.00%	39.70%			

Lack of regard for diversity of interests and abilities	N	2	14	30	82	81	4.08	0.93	13
	%	1.00%	6.70%	14.40%	39.20%	38.80%			
Inadequate in-service training for teachers	N	3	16	23	75	92	4.13	0.98	11
	%	1.40%	7.70%	11.00%	35.90%	44.00%			
Non-acceptance by other girls	N	6	31	53	68	51	3.6	1.09	18
	%	2.90%	14.80%	25.40%	32.50%	24.40%			
The absence of educational policy for inclusion in Saudi Arabia or the absence clear vision for change	N	5	7	27	74	96	4.19	0.95	9
	%	2.40%	3.30%	12.90%	35.40%	45.90%			
Inadequate funding	N	6	11	21	51	120	4.28	1.03	6
	%	2.90%	5.30%	10.00%	24.40%	57.40%			

Table 6: descriptive statistics reflecting the importance of methods for improving inclusion

		Least	2	3	4	5	6	7	8	9	Most	Mean	SD	Rank
Direct teaching experience with girls with disabilities	N	2	1	6	7	5	13	5	14	31	125	8.75	2.09	1
	%	1.0%	.5%	2.9%	3.3%	2.4%	6.2%	2.4%	6.7%	14.8%	59.8%			
Observation of other teachers in inclusive settings	N	5	2	9	5	5	26	21	25	41	70	7.90	2.31	5
	%	2.4%	1.0%	4.3%	2.4%	2.4%	12.4%	10.0%	12.0%	19.6%	33.5%			
In-services training/workshops	N	5	5	7	4	4	13	8	18	41	104	8.41	2.38	2
	%	2.4%	2.4%	3.3%	1.9%	1.9%	6.2%	3.8%	8.6%	19.6%	49.8%			
Consultation activities with other teachers, specialists and parents	N	6	7	6	3	9	16	23	20	39	80	7.95	2.47	4
	%	2.9%	3.3%	2.9%	1.4%	4.3%	7.7%	11.0%	9.6%	18.7%	38.3%			

Exposure to girls with disabilities	N	4	3	2	6	8	18	16	20	34	98	8.35	2.20	3
	%	1.9%	1.4%	1.0%	2.9%	3.8%	8.6%	7.7%	9.6%	16.3%	46.9%			
Discussion groups on inclusive practices	N	8	2	6	8	18	18	20	25	38	66	7.66	2.47	6
	%	3.8%	1.0%	2.9%	3.8%	8.6%	8.6%	9.6%	12.0%	18.2%	31.6%			
University coursework	N	11	10	14	13	10	12	10	26	34	69	7.27	2.94	7
	%	5.3%	4.8%	6.7%	6.2%	4.8%	5.7%	4.8%	12.4%	16.3%	33.0%			
Research involvement	N	13	11	15	10	16	14	21	31	34	44	6.81	2.86	10
	%	6.2%	5.3%	7.2%	4.8%	7.7%	6.7%	10.0%	14.8%	16.3%	21.1%			
Collaborative experiences with university faculty	N	17	13	18	7	4	19	15	28	37	51	6.84	3.06	9
	%	8.1%	6.2%	8.6%	3.3%	1.9%	9.1%	7.2%	13.4%	17.7%	24.4%			

Independent reading	N	23	3	10	10	12	24	17	23	37	50	6.88	2.97	8
	%	11.0%	1.4%	4.8%	4.8%	5.7%	11.5%	8.1%	11.0%	17.7%	23.9%			

Table 11: Descriptive statistics for each of the four dependent variables

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Advantages	209	3.43	1.57	5.00	4.1377	.59039	-.928	.168	1.717	.335
Disadvantages	209	2.80	2.20	5.00	3.4182	.53597	.245	.168	.070	.335
Barriers	209	3.15	1.85	5.00	4.1108	.54681	-.696	.168	1.082	.335
Methods	209	8.80	1.20	10.00	7.6880	1.93115	-.824	.168	.045	.335

Table 12: Descriptive statistics for the age groups

Descriptives									
						95% Confidence Interval for Mean			
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Advantages	21-25	18	4.2778	.57764	.13615	3.9905	4.5650	3.29	5.00
	26—30	55	4.0870	.68425	.09226	3.9020	4.2720	1.57	5.00
	31-35	123	4.1469	.54616	.04925	4.0494	4.2444	2.21	5.00
	=>36	13	4.0714	.61859	.17157	3.6976	4.4452	2.50	4.93
	Total	209	4.1377	.59039	.04084	4.0572	4.2182	1.57	5.00
Disadvantages	21-25	18	3.5111	.56244	.13257	3.2314	3.7908	2.90	5.00
	26—30	55	3.4400	.59895	.08076	3.2781	3.6019	2.20	5.00
	31-35	123	3.4309	.49986	.04507	3.3417	3.5201	2.30	4.50
	=>36	13	3.0769	.48331	.13405	2.7849	3.3690	2.30	3.70
	Total	209	3.4182	.53597	.03707	3.3451	3.4913	2.20	5.00
Barriers	21-25	18	4.1694	.53609	.12636	3.9029	4.4360	3.25	5.00
	26—30	55	4.1300	.61468	.08288	3.9638	4.2962	1.85	5.00
	31-35	123	4.0805	.53338	.04809	3.9853	4.1757	2.40	4.95

	=>36	13	4.2346	.38751	.10747	4.0004	4.4688	3.60	4.85
	Total	209	4.1108	.54681	.03782	4.0362	4.1853	1.85	5.00
Methods	21-25	18	7.5500	1.88438	.44415	6.6129	8.4871	3.40	10.00
	26—30	55	7.5836	2.05532	.27714	7.0280	8.1393	2.00	10.00
	31-35	123	7.7244	1.88516	.16998	7.3879	8.0609	1.20	10.00
	=>36	13	7.9769	2.07089	.57436	6.7255	9.2284	2.70	10.00
	Total	209	7.6880	1.93115	.13358	7.4247	7.9514	1.20	10.00

Table 13: the ANOVA table showing the effect of age on the dependent variables

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Advantages	Between Groups	.562	3	.187	.534	.660
	Within Groups	71.938	205	.351		
	Total	72.500	208			
Disadvantages	Between Groups	1.715	3	.572	2.020	.112
	Within Groups	58.035	205	.283		
	Total	59.751	208			
Barriers	Between Groups	.394	3	.131	.436	.727
	Within Groups	61.799	205	.301		
	Total	62.193	208			
Methods	Between Groups	2.190	3	.730	.193	.901
	Within Groups	773.510	205	3.773		
	Total	775.700	208			

Table 14: Table of descriptive statistics for the experience categories

Descriptives									
						95% Confidence Interval for Mean			
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Advantages	1-5	36	3.8750	.62606	.10434	3.6632	4.0868	2.50	4.79
	6-10	48	4.0015	.68867	.09940	3.8015	4.2015	1.57	4.79
	11-15	38	4.1485	.45944	.07453	3.9975	4.2995	3.00	4.79
	16-20	59	4.2567	.51782	.06741	4.1217	4.3916	3.29	5.00
	>=21	28	4.4439	.48264	.09121	4.2567	4.6310	3.50	5.00
	Total	209	4.1377	.59039	.04084	4.0572	4.2182	1.57	5.00
Disadvantages	1-5	36	3.5083	.55978	.09330	3.3189	3.6977	2.20	4.60
	6-10	48	3.4208	.58925	.08505	3.2497	3.5919	2.20	4.70
	11-15	38	3.3947	.48208	.07820	3.2363	3.5532	2.50	4.40
	16-20	59	3.3373	.49162	.06400	3.2092	3.4654	2.30	5.00
	>=21	28	3.5000	.57607	.10887	3.2766	3.7234	2.60	5.00
	Total	209	3.4182	.53597	.03707	3.3451	3.4913	2.20	5.00
Barriers	1-5	36	4.0361	.43648	.07275	3.8884	4.1838	3.25	4.85

	6-10	48	4.0354	.55457	.08005	3.8744	4.1964	2.50	4.80
	11-15	38	3.9947	.58388	.09472	3.8028	4.1867	1.85	5.00
	16-20	59	4.1356	.56125	.07307	3.9893	4.2819	2.40	5.00
	>=21	28	4.4411	.47572	.08990	4.2566	4.6255	3.15	5.00
	Total	209	4.1108	.54681	.03782	4.0362	4.1853	1.85	5.00
Methods	1-5	36	7.6556	1.88838	.31473	7.0166	8.2945	2.70	10.00
	6-10	48	7.2396	2.04791	.29559	6.6449	7.8342	1.20	10.00
	11-15	38	8.2079	1.62969	.26437	7.6722	8.7436	3.60	10.00
	16-20	59	7.8339	1.85515	.24152	7.3504	8.3174	3.30	10.00
	>=21	28	7.4857	2.22390	.42028	6.6234	8.3481	2.00	10.00
	Total	209	7.6880	1.93115	.13358	7.4247	7.9514	1.20	10.00

Table 15: the ANOVA table showing the effect of experience on the dependent variables

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Advantages	Between Groups	6.839	4	1.710	5.312	.000
	Within Groups	65.660	204	.322		
	Total	72.500	208			
Disadvantages	Between Groups	.887	4	.222	.769	.547
	Within Groups	58.864	204	.289		
	Total	59.751	208			
Barriers	Between Groups	4.076	4	1.019	3.577	.008
	Within Groups	58.117	204	.285		
	Total	62.193	208			
Methods	Between Groups	22.362	4	5.591	1.514	.199
	Within Groups	753.338	204	3.693		
	Total	775.700	208			

Table 16: Table of descriptive statistics for the educational categories

Descriptives									
						95% Confidence Interval for Mean			
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Advantages	Diploma	7	4.2653	.62504	.23624	3.6872	4.8434	3.36	5.00
	BA	195	4.1337	.59946	.04293	4.0490	4.2184	1.57	5.00
	Masters	7	4.1224	.23224	.08778	3.9077	4.3372	3.71	4.36
	Total	209	4.1377	.59039	.04084	4.0572	4.2182	1.57	5.00
Disadvantages	Diploma	7	3.7571	.58554	.22131	3.2156	4.2987	3.20	5.00
	BA	195	3.4231	.52772	.03779	3.3485	3.4976	2.20	5.00
	Masters	7	2.9429	.46136	.17438	2.5162	3.3695	2.20	3.60
	Total	209	3.4182	.53597	.03707	3.3451	3.4913	2.20	5.00
Barriers	Diploma	7	4.3714	.42117	.15919	3.9819	4.7609	3.90	5.00
	BA	195	4.1010	.55439	.03970	4.0227	4.1793	1.85	5.00
	Masters	7	4.1214	.41014	.15502	3.7421	4.5007	3.55	4.75
	Total	209	4.1108	.54681	.03782	4.0362	4.1853	1.85	5.00
Methods	Diploma	7	9.0571	1.09370	.41338	8.0456	10.0687	6.90	10.00
	BA	195	7.6564	1.94626	.13937	7.3815	7.9313	1.20	10.00
	Masters	7	7.2000	1.76446	.66690	5.5681	8.8319	3.70	8.80
	Total	209	7.6880	1.93115	.13358	7.4247	7.9514	1.20	10.00

Table 17: ANOVA table showing the effect of education on the dependent variables

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Advantages	Between Groups	.119	2	.059	.169	.845
	Within Groups	72.381	206	.351		
	Total	72.500	208			
Disadvantages	Between Groups	2.390	2	1.195	4.292	.015
	Within Groups	57.360	206	.278		
	Total	59.751	208			
Barriers	Between Groups	.495	2	.247	.826	.439
	Within Groups	61.698	206	.300		
	Total	62.193	208			
Methods	Between Groups	14.983	2	7.492	2.029	.134
	Within Groups	760.717	206	3.693		
	Total	775.700	208			

Table 18: Table of descriptive statistics for the school types

Group Statistics					
	School	N	Mean	Std. Deviation	Std. Error Mean
Advantages	Unit in regular school	159	4.1626	.53879	.04273
	Full inclusion	50	4.0586	.73153	.10345
Disadvantages	Unit in regular school	159	3.3887	.55689	.04416
	Full inclusion	50	3.5120	.45564	.06444
Barriers	Unit in regular school	159	4.1113	.54575	.04328
	Full inclusion	50	4.1090	.55574	.07859
Methods	Unit in regular school	159	7.6761	1.94963	.15462
	Full inclusion	50	7.7260	1.89002	.26729

Table 19: table showing the independent samples t-test results

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Advantages	Equal variances assumed	3.954	.048	1.087	207	.278	.10405	.09568	-.08459	.29269
	Equal variances not assumed			.930	66.543	.356	.10405	.11193	-.11939	.32749
Disadvantages	Equal variances assumed	1.877	.172	-1.423	207	.156	-.12332	.08669	-.29423	.04759
	Equal variances not assumed			-1.579	99.068	.118	-.12332	.07812	-.27833	.03168
Barriers	Equal variances assumed	.152	.697	.026	207	.979	.00232	.08887	-.17289	.17754
	Equal variances not assumed			.026	80.919	.979	.00232	.08972	-.17620	.18084
Methods	Equal variances assumed	.002	.964	-.159	207	.874	-.04990	.31385	-.66866	.56886
	Equal variances not assumed			-.162	84.350	.872	-.04990	.30879	-.66392	.56412

Table 20: Table of descriptive statistics for those who have, or have not, received training in SEN

Group Statistics					
	Training in SEN	N	Mean	Std. Deviation	Std. Error Mean
Advantages	Yes	174	4.1769	.56893	.04313
	No	35	3.9429	.66213	.11192
Disadvantages	Yes	174	3.3971	.55208	.04185
	No	35	3.5229	.43931	.07426
Barriers	Yes	174	4.0966	.56427	.04278
	No	35	4.1814	.45050	.07615
Methods	Yes	174	7.7098	1.92293	.14578
	No	35	7.5800	1.99644	.33746

Table 21: table showing the independent samples t-test results

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Advantages	Equal variances assumed	.254	.615	2.159	207	.032	.23407	.10842	.02032	.44782
	Equal variances not assumed			1.952	44.655	.057	.23407	.11994	-.00756	.47570
Disadvantages	Equal variances assumed	1.332	.250	-1.268	207	.206	-.12573	.09915	-.32119	.06973
	Equal variances not assumed			-1.475	57.885	.146	-.12573	.08524	-.29636	.04490
Barriers	Equal variances assumed	.951	.331	-.837	207	.403	-.08488	.10137	-.28473	.11498
	Equal variances not assumed			-.972	57.715	.335	-.08488	.08734	-.25973	.08997
Methods	Equal variances assumed	.947	.332	.362	207	.718	.12977	.35850	-.57701	.83655
	Equal variances not assumed			.353	47.548	.726	.12977	.36760	-.60952	.86906

Table 22: Table of descriptive statistics for those who have/had contact with SEN children outside of school.

Group Statistics					
	Contact SEN	N	Mean	Std. Deviation	Std. Error Mean
Advantages	Yes	37	4.3127	.51573	.08478
	No	172	4.1001	.59994	.04574
Disadvantages	Yes	37	3.5270	.59752	.09823
	No	172	3.3948	.52071	.03970
Barriers	Yes	37	4.5743	.40442	.06649
	No	172	4.0110	.52228	.03982
Methods	Yes	37	7.7622	2.09978	.34520
	No	172	7.6721	1.89910	.14481

Table 23: table showing the independent samples t-test results

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Advantages	Equal variances assumed	.147	.702	2.002	207	.047	.21266	.10622	.00324	.42208
	Equal variances not assumed			2.207	58.959	.031	.21266	.09634	.01988	.40543
Disadvantages	Equal variances assumed	.586	.445	1.365	207	.174	.13226	.09693	-.05883	.32335
	Equal variances not assumed			1.248	48.451	.218	.13226	.10595	-.08072	.34524

Barriers	Equal variances assumed	.980	.323	6.170	207	.000	.56328	.09129	.38330	.74326
	Equal variances not assumed			7.268	64.710	.000	.56328	.07750	.40848	.71807
Methods	Equal variances assumed	.378	.539	.257	207	.798	.09007	.35075	-.60144	.78157
	Equal variances not assumed			.241	49.462	.811	.09007	.37434	-.66202	.84216

Table 24: Pearson's' correlation matrix between variables

Correlations					
		Advantages	Disadvantages	Barriers	Methods
Advantages	Pearson Correlation	1	-.136*	.052	.127
	Sig. (2-tailed)		.050	.452	.067
	N	209	209	209	209
Disadvantages	Pearson Correlation	-.136*	1	.371**	.006
	Sig. (2-tailed)	.050		.000	.927
	N	209	209	209	209
Barriers	Pearson Correlation	.052	.371**	1	.080
	Sig. (2-tailed)	.452	.000		.251
	N	209	209	209	209
Methods	Pearson Correlation	.127	.006	.080	1
	Sig. (2-tailed)	.067	.927	.251	
	N	209	209	209	209
*. Correlation is significant at the 0.05 level (2-tailed).					
**. Correlation is significant at the 0.01 level (2-tailed).					

Table 28: descriptive statistics of disabilities and the preferred educational setting for SEN children

		Home	Residential Care	Special school	Special class in MS	Inclusion and out-class support	Inclusion and in-class support
Visual impairment	N	8	29	103	34	17	23
	%	3.7	13.6	48.1	15.9	7.9	10.7
Hearing impairment	N	9	22	101	37	21	24
	%	4.2	10.3	47.2	17.3	9.8	11.2
Physical disability	N	6	50	76	24	20	38
	%	2.8	23.4	35.5	11.2	9.3	17.8
Intellectual disability	N	12	78	83	24	7	10
	%	5.6	36.4	38.8	11.2	3.3	4.7
Challenging behaviour	N	15	58	85	21	17	18
	%	7.0	27.1	39.7	9.8	7.9	8.4
Learning difficulties	N	10	21	93	33	33	24
	%	4.7	9.8	43.5	15.4	15.4	11.2
Autism	N	9	61	83	31	13	17
	%	4.2	28.5	38.8	14.5	6.1	7.9

Table 29: descriptive statistics for the advantages of inclusion for SEN students

		S. D	D.	Un.	A.	S. A	M	SD	R
Girls with special needs have the right to be educated in the same classroom as typically developing girls	N	26	37	45	51	55	3.33	1.34	12
	%	12.15	17.29	21.03	23.83	25.70			
Girls with exceptional needs should be given every opportunity to function in an integrated classroom	N	13	33	31	46	91	3.78	1.30	6
	%	6.07	15.42	14.49	21.50	42.52			
Inclusion can be beneficial for parents of girls with exceptional needs	N	11	26	50	56	71	3.70	1.19	8
	%	5.14	12.15	23.36	26.17	33.18			
Parents of girls with exceptional needs prefer to have their child placed in an inclusive classroom setting	N	16	25	55	48	70	3.61	1.25	9
	%	7.48	11.68	25.70	22.43	32.71			
Most girls with exceptional needs are well behaved in integrated education classrooms	N	13	34	42	58	6	3.61	1.24	9
	%	6.07	15.89	19.63	27.10	31.31			
Inclusion is socially advantageous for girls with special needs	N	7	23	35	54	95	3.96	1.15	3
	%	3.27	10.75	16.36	25.23	44.39			

The presence of girls with exceptional education needs promotes acceptance of individual differences on the part of typically developing girls.	N	10	10	50	59	85	3.92	1.11	4
	%	4.67	4.67	23.36	27.57	39.72			
Inclusion promotes social independence among girls with special needs	N	13	32	42	64	63	3.61	1.22	9
	%	6.07	14.95	19.63	29.91	29.44			
Inclusion promotes self-esteem among girls with special needs	N	8	29	46	45	86	3.80	1.20	5
	%	3.74	13.55	21.50	21.03	40.19			
Girls with exceptional needs are likely to exhibit more challenging behaviours in an integrated classroom setting	N	11	19	55	59	70	3.73	1.15	7
	%	5.14	8.88	25.70	27.57	32.71			
Girls with special needs in inclusive classrooms develop a better self-concept than in a self-contained classroom	N	11	29	60	60	54	3.54	1.156	10
	%	5.14	13.55	28.04	28.04	25.23			
The challenge of a mainstream education classroom promotes academic growth among girls with exceptional education needs	N	9	27	74	63	41	3.46	1.06	11
	%	4.21	12.62	34.58	29.44	19.16			

Typically developing girls in inclusive classrooms are more likely to exhibit challenging behaviours learned from girls with special needs	N	6	6	24	97	81	4.12	.918	2
	%	2.80	2.80	11.21	45.33	37.85			
A good approach to managing inclusive classrooms is to have a special education teacher be responsible for instructing the girls with special needs	N	6.	4	14	49	141	4.47	.912	1
	%	2.80	1.87	6.54	22.90	65.89			

Table 30: Descriptive statistics for the disadvantages of inclusion for SEN students

		S. D	D.	Un.	A.	S. A	M	SD	R
Inclusion is NOT a desirable practice for educating most typically developing girls	N	23	35	63	58	35	3.21	1.21	9
	%	10.75	16.36	29.44	27.10	16.36			
It is difficult to maintain order in a classroom that contains a mix of girls with exceptional education needs and children with average abilities	N	13	41	34	50	76	3.63	1.30	6
	%	6.07	19.16	15.89	23.36	35.51			
Most special education teachers lack an appropriate knowledge base to educate typically developing girls effectively	N	17	32	65	56	44	3.36	1.19	8
	%	7.94	14.95	30.37	26.17	20.56			
The individual needs of girls with disabilities CANNOT be addressed adequately by a regular education teacher	N	7	11	19	49	128	4.30	1.04	1
	%	3.27	5.14	8.88	22.90	59.81			
Girls with special needs will probably develop academic skills more rapidly in a special, separate classroom than in an integrated classroom. And positive	N	12	31	48	43	80	3.69	1.26	5
	%	5.61	14.49	22.43	20.09	37.38			
Girls with special educational needs are likely to be isolated by typically developing girls in inclusive classrooms	N	19	28	43	59	65	3.57	1.28	7
	%	8.88	13.08	20.09	27.57	30.37			

Isolation in a special class does NOT have a negative effect on the social and emotional development of girls prior to middle school	N	40	54	39	45	36	2.92	1.37	10
	%	18.69	25.23	18.22	21.03	16.82			
Girls with exceptional needs monopolize teachers' time	N	10	29	34	71	70	3.75	1.18	3
	%	4.67	13.55	15.89	33.18	32.71			
The behaviours of girls with special needs require significantly more teacher-directed attention than those of typically developing girls	N	9	18	35	74	78	3.90	1.11	2
	%	4.21	8.41	16.36	34.58	36.45			
Parents of girls with exceptional education needs require more supportive services from teachers than parents of typically developing girls.	N	10	20	56	62	66	3.71	1.13	4
	%	4.67	9.35	26.17	28.97	30.84			

Table 32: Descriptive statistics for barriers to inclusion

		S. D	D.	Un.	A.	S. A	M	SD	R
Inadequate pre-service preparation of teachers	N	5	8	17	39	145	4.45	0.96	4
	%	2.3	3.7	7.9	18.2	67.8			
Overload on the part of teachers	N	2	9	14	55	134	4.45	0.86	4
	%	.9	4.2	6.5	25.7	62.6			
Classrooms do not accommodate girls with disabilities	N	3	6	7	34	164	4.64	0.80	1
	%	1.4	2.8	3.3	15.9	76.6			
Absence of regulations that support inclusion	N	4	4	24	47	135	4.43	0.90	5
	%	1.9	1.9	11.2	22.0	63.1			
Teachers' negative attitudes	N	6	17	28	64	99	4.09	1.08	11
	%	2.8	7.9	13.1	29.9	46.3			
Resistance among administrators	N	7	15	73	58	61	3.71	1.06	13
	%	3.3	7.0	34.1	27.1	28.5			

Non-acceptance by other parents	N	12	18	59	70	55	3.64	1.12	14
	%	5.6	8.4	27.6	32.7	25.7			
Little knowledge of special educational needs	N	2	3	12	51	146	4.57	0.75	3
	%	.9	1.4	5.6	23.8	68.2			
Lack of experience regarding inclusion	N	4	2	7	43	158	4.63	0.76	2
	%	1.9	.9	3.3	20.1	73.8			
Class size or large teacher/pupil ratio	N	7	10	13	37	147	4.43	1.02	5
	%	3.3	4.7	6.1	17.3	68.7			
Limited time for teachers to give sufficient attention to girls with SEN	N	9	5	17	48	135	4.38	1.02	7
	%	4.2	2.3	7.9	22.4	63.1			
Lack of equipment and appropriate educational materials	N	2	4	9	40	159	4.64	0.74	1

	%	.9	1.9	4.2	18.7	74.3			
Non-acceptance by parents of SEN girls	N	16	26	88	35	49	3.35	1.18	16
	%	7.5	12.1	41.1	16.4	22.9			
Behaviour management	N	1	13	41	63	96	4.12	0.96	10
	%	.5	6.1	19.2	29.4	44.9			
Rigidity in curriculum design and examination	N	2	16	35	53	108	4.16	1.01	9
	%	.9	7.5	16.4	24.8	50.5			
Lack of regard for diversity of interests and abilities	N	5	21	39	61	88	3.96	1.10	12
	%	2.3	9.8	18.2	28.5	41.1			
Inadequate in-service training for teachers	N	2	5	23	56	128	4.42	0.84	6
	%	.9	2.3	10.7	26.2	59.8			

Non-acceptance by other girls	N	14	28	41	75	56	3.61	1.19	15
	%	6.5	13.1	19.2	35.0	26.2			
The absence of educational policy for inclusion in Saudi Arabia or the absence clear vision for change	N	1	2	34	76	101	4.28	0.80	8
	%	.5	.9	15.9	35.5	47.2			
Inadequate funding	N	5	9	31	46	123	4.28	1.01	8
	%	2.3	4.2	14.5	21.5	57.5			

Table 33: descriptive statistics reflecting the importance of methods for improving inclusion

		Least	2	3	4	5	6	7	8	9	Most	Mean	SD	Rank
Direct teaching experience with girls with disabilities	N	19	5	5	1	4	18	7	9	16	130	8.13	2.98	1
	%	8.9	2.3	2.3	.5	1.9	8.4	3.3	4.2	7.5	60.7			
Observation of other teachers in inclusive settings	N	10	5	8	2	8	15	16	35	42	73	7.85	2.54	2
	%	4.7	2.3	3.7	0.9	3.7	7.0	7.5	16.4	19.6	34.1			
In-service training/workshops	N	18	4	13	4	6	10	6	19	24	110	7.85	3.04	2
	%	8.4	1.9	6.1	1.9	2.8	4.7	2.8	8.9	11.2	51.4			
Consultation activities with other teachers, specialists and parents	N	12	6	11	5	5	9	16	42	19	89	7.78	2.75	3
	%	5.6	2.8	5.1	2.3	2.3	4.2	7.5	19.6	8.9	41.6			
Exposure to girls with disabilities	N	17	8	4	8	7	22	29	20	23	76	7.35	2.88	7
	%	7.9	3.7	1.9	3.7	3.3	10.3	13.6	9.3	10.7	35.5			
Discussion groups on inclusive practices	N	15	6	7	12	5	20	19	20	40	70	7.44	2.83	5

	%	7.0	2.8	3.3	5.6	2.3	9.3	8.9	9.3	18.7	32.7			
University coursework	N	18	7	9	7	10	17	15	23	22	86	7.41	3.01	6
	%	8.4	3.3	4.2	3.3	4.7	7.9	7.0	10.7	10.3	40.2			
Research involvement	N	19	3	13	16	7	10	24	21	23	78	7.22	3.02	9
	%	8.9	1.4	6.1	7.5	3.3	4.7	11.2	9.8	10.7	36.4			
Collaborative experiences with university faculty	N	16	8	6	10	7	17	12	20	34	84	7.55	2.94	4
	%	7.5	3.7	2.8	4.7	3.3	7.9	5.6	9.3	15.9	39.3			
Independent reading	N	14	8	8	6	10	23	18	31	28	68	7.34	2.80	8
	%	6.5	3.7	3.7	2.8	4.7	10.7	8.4	14.5	13.1	31.8			

Table 39: Table of descriptive statistics for the variables and the different age groups

Descriptives									
						95% Confidence Interval for Mean			
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Advantages	21-25	16	4.0714	.61721	.15430	3.7425	4.4003	2.57	4.86
	26-30	23	4.1832	.56153	.11709	3.9404	4.4261	3.07	4.93
	31-35	103	3.6831	.79669	.07850	3.5274	3.8388	1.29	5.00
	=>36	72	3.6835	.89991	.10606	3.4721	3.8950	1.00	5.00
	Total	214	3.7660	.81530	.05573	3.6562	3.8759	1.00	5.00
Disadvantages	21-25	16	3.2125	.53151	.13288	2.9293	3.4957	2.20	4.30
	26--30	23	3.6000	.59620	.12432	3.3422	3.8578	2.50	4.60
	31-35	103	3.6515	.60047	.05917	3.5341	3.7688	1.50	5.00
	=>36	72	3.6403	.69092	.08143	3.4779	3.8026	1.00	4.90
	Total	214	3.6093	.63357	.04331	3.5240	3.6947	1.00	5.00
Barriers	21-25	16	4.0781	.39873	.09968	3.8657	4.2906	3.25	4.65
	26-30	23	4.2000	.43719	.09116	4.0109	4.3891	3.10	5.00
	31-35	103	4.2403	.48573	.04786	4.1454	4.3352	2.90	5.00
	=>36	72	4.2042	.59722	.07038	4.0638	4.3445	1.00	5.00
	Total	214	4.2117	.51437	.03516	4.1424	4.2810	1.00	5.00

Methods	21-25	16	7.6813	2.34698	.58674	6.4306	8.9319	2.20	9.90
	26--30	23	8.4478	2.06593	.43078	7.5545	9.3412	1.20	10.00
	3135	103	7.5340	2.31015	.22763	7.0825	7.9855	1.50	10.00
	=>36	72	7.3972	2.52213	.29724	6.8046	7.9899	1.00	10.00
	Total	214	7.5972	2.36619	.16175	7.2784	7.9160	1.00	10.00

Table 40: the ANOVA table showing the effect of age on the dependent variables

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Advantages	Between Groups	6.694	3	2.231	3.474	.017
	Within Groups	134.891	210	.642		
	Total	141.585	213			
Disadvantages	Between Groups	2.773	3	.924	2.347	.074
	Within Groups	82.728	210	.394		
	Total	85.501	213			

Barriers	Between Groups	.377	3	.126	.471	.703
	Within Groups	55.979	210	.267		
	Total	56.356	213			
Methods	Between Groups	20.046	3	6.682	1.197	.312
	Within Groups	1172.512	210	5.583		
	Total	1192.558	213			

Table 41: Table of descriptive statistics for the experience categories

Descriptives									
						95% Confidence Interval for Mean			
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Advantages	1-5	46	4.0590	.77406	.11413	3.8291	4.2889	2.29	5.00
	6-10	33	4.0455	.62597	.10897	3.8235	4.2674	2.00	4.93
	11-15	43	3.3904	.68376	.10427	3.1799	3.6008	2.21	4.93
	16-21	44	3.7289	.83549	.12596	3.4749	3.9829	1.29	5.00
	>21	48	3.6637	.91413	.13194	3.3983	3.9291	1.00	5.00
	Total	214	3.7660	.81530	.05573	3.6562	3.8759	1.00	5.00
Disadvantages	1-5	46	3.4783	.64598	.09525	3.2864	3.6701	1.50	4.60
	6-10	33	3.5242	.56238	.09790	3.3248	3.7237	2.70	4.80
	11-15	43	3.7907	.58749	.08959	3.6099	3.9715	2.40	4.60
	16-21	44	3.6932	.57360	.08647	3.5188	3.8676	2.60	5.00

	>21	48	3.5542	.73019	.10539	3.3421	3.7662	1.00	4.80
	Total	214	3.6093	.63357	.04331	3.5240	3.6947	1.00	5.00
Barriers	1-5	46	4.2152	.43702	.06443	4.0854	4.3450	3.10	5.00
	6-10	33	4.0439	.48279	.08404	3.8727	4.2151	2.90	4.80
	11-15	43	4.3372	.44025	.06714	4.2017	4.4727	3.20	5.00
	16-21	44	4.2205	.49207	.07418	4.0709	4.3701	3.25	5.00
	>21	48	4.2031	.65456	.09448	4.0131	4.3932	1.00	5.00
	Total	214	4.2117	.51437	.03516	4.1424	4.2810	1.00	5.00
Methods	1-5	46	7.8413	1.96984	.29044	7.2563	8.4263	2.20	10.00
	6-10	33	7.5515	2.56309	.44618	6.6427	8.4603	1.20	10.00
	11-15	43	8.0837	2.04391	.31169	7.4547	8.7127	1.60	10.00
	16-21	44	7.0795	2.54765	.38407	6.3050	7.8541	1.00	10.00
	>21	48	7.4333	2.63813	.38078	6.6673	8.1994	1.10	10.00
	Total	214	7.5972	2.36619	.16175	7.2784	7.9160	1.00	10.00

Table 42: ANOVA table showing the effects of experience on the dependent variables

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Advantages	Between Groups	13.157	4	3.289	5.353	.000
	Within Groups	128.429	209	.614		
	Total	141.585	213			
Disadvantages	Between Groups	2.899	4	.725	1.834	.124
	Within Groups	82.602	209	.395		
	Total	85.501	213			
Barriers	Between Groups	1.614	4	.403	1.540	.192
	Within Groups	54.742	209	.262		
	Total	56.356	213			
Methods	Between Groups	26.068	4	6.517	1.168	.326
	Within Groups	1166.491	209	5.581		
	Total	1192.558	213			

Table 43: Table of descriptive statistics for the educational categories

Descriptive									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
C. Advantages	None	169	3.6758	.83416	.06417	3.5491	3.8025	1.00	5.00
	Diploma	35	4.0816	.64870	.10965	3.8588	4.3045	2.29	4.93
	Masters	10	4.1857	.64611	.20432	3.7235	4.6479	3.21	4.93
	Total	214	3.7660	.81530	.05573	3.6562	3.8759	1.00	5.00
C. Disadvantages	None	169	3.6769	.61218	.04709	3.5840	3.7699	1.00	5.00
	Diploma	35	3.3686	.63328	.10704	3.1510	3.5861	1.50	4.80
	Masters	10	3.3100	.76077	.24058	2.7658	3.8542	2.40	4.60
	Total	214	3.6093	.63357	.04331	3.5240	3.6947	1.00	5.00
Barriers	None	169	4.2254	.52548	.04042	4.1456	4.3052	1.00	5.00
	Diploma	35	4.1343	.48549	.08206	3.9675	4.3011	2.90	4.90
	Masters	10	4.2500	.43397	.13723	3.9396	4.5604	3.55	5.00
	Total	214	4.2117	.51437	.03516	4.1424	4.2810	1.00	5.00
Methods	None	169	7.3509	2.47754	.19058	6.9746	7.7271	1.00	10.00
	Diploma	35	8.5686	1.67416	.28298	7.9935	9.1437	2.20	10.00
	Masters	10	8.3600	1.37210	.43390	7.3785	9.3415	6.50	10.00
	Total	214	7.5972	2.36619	.16175	7.2784	7.9160	1.00	10.00

Table 44: ANOVA table showing the effect of education on the dependent variables

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
C. Advantages	Between Groups	6.623	2	3.311	5.177	.006
	Within Groups	134.963	211	.640		
	Total	141.585	213			
C. Disadvantages	Between Groups	3.697	2	1.848	4.768	.009
	Within Groups	81.804	211	.388		
	Total	85.501	213			
Barriers	Between Groups	.256	2	.128	.482	.618
	Within Groups	56.099	211	.266		
	Total	56.356	213			
Methods	Between Groups	49.097	2	24.548	4.530	.012
	Within Groups	1143.462	211	5.419		
	Total	1192.558	213			

Table 45: Table of descriptive statistics for teachers' preferred educational settings for SEN children

Group Statistics					
	School	N	Mean	Std. Deviation	Std. Error Mean
C. Advantages	Unit in regular school	116	3.8417	.74116	.06881
	Full inclusion	98	3.6764	.89074	.08998
C. Disadvantages	Unit in regular school	116	3.5733	.57459	.05335
	Full inclusion	98	3.6520	.69760	.07047
Barriers	Unit in regular school	116	4.2190	.49750	.04619
	Full inclusion	98	4.2031	.53611	.05416
Methods	Unit in regular school	116	7.5819	2.30057	.21360
	Full inclusion	98	7.6153	2.45337	.24783

Table 46: table showing the independent samples t-test results

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
C. Advantages	Equal variances assumed	4.527	.035	1.482	212	.140	.16536	.11155	-.05452	.38525
	Equal variances not assumed			1.460	189.092	.146	.16536	.11328	-.05808	.38881
C. Disadvantages	Equal variances assumed	3.085	.080	-.906	212	.366	-.07876	.08697	-.25019	.09266
	Equal variances not assumed			-.891	187.972	.374	-.07876	.08838	-.25312	.09559
Barriers	Equal variances assumed	1.187	.277	.225	212	.822	.01590	.07073	-.12352	.15533
	Equal variances not assumed			.223	200.133	.823	.01590	.07118	-.12445	.15626

Methods	Equal variances assumed	.691	.407	-.103	212	.918	-.03341	.32541	-.67486	.60804
	Equal variances not assumed			-.102	201.058	.919	-.03341	.32718	-.67855	.61173

Table 47: Table of descriptive statistics those who have, or do not have, training in SEN

Group Statistics					
	Training in SEN	N	Mean	Std. Deviation	Std. Error Mean
Advantages	Yes	68	4.0714	.61680	.07480
	No	146	3.6238	.85822	.07103
Disadvantages	Yes	68	3.3926	.64561	.07829
	No	146	3.7103	.60398	.04999
Barriers	Yes	68	4.1838	.46612	.05653
	No	146	4.2247	.53641	.04439
Methods	Yes	68	7.7471	2.11614	.25662
	No	146	7.5274	2.47789	.20507

Table 48: table showing the independent samples t-test results

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Advantages	Equal variances assumed	11.180	.001	3.860	212	.000	.44765	.11598	.21904	.67627
	Equal variances not assumed			4.340	176.132	.000	.44765	.10315	.24409	.65122
Disadvantages	Equal variances assumed	.001	.980	-3.504	212	.001	-.31763	.09065	-.49632	-.13894
	Equal variances not assumed			-3.419	123.289	.001	-.31763	.09289	-.50149	-.13377
Barriers	Equal variances assumed	.145	.704	-.540	212	.590	-.04083	.07564	-.18995	.10828

	Equal variances not assumed			-.568	148.955	.571	-.04083	.07187	-.18286	.10119
Methods	Equal variances assumed	3.215	.074	.631	212	.528	.21966	.34789	-.46610	.90543
	Equal variances not assumed			.669	151.372	.505	.21966	.32849	-.42936	.86869

Table 49: Table of descriptive statistics those who have /had contact with SEN children outside school.

Group Statistics					
	Contact SEN	N	Mean	Std. Deviation	Std. Error Mean
Advantages	Yes	50	3.9871	.81232	.11488
	No	164	3.6986	.80665	.06299
Disadvantages	Yes	50	3.6080	.66879	.09458
	No	164	3.6098	.62457	.04877
Barriers	Yes	50	4.1620	.51295	.07254
	No	164	4.2268	.51542	.04025
Methods	Yes	50	7.7960	2.19284	.31011
	No	164	7.5366	2.41971	.18895

Table 50: table showing the independent samples t-test results

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Advantages	Equal variances assumed	.016	.898	2.211	212	.028	.28854	.13052	.03124	.54583
	Equal variances not assumed			2.202	80.698	.030	.28854	.13102	.02784	.54923
Disadvantages	Equal variances assumed	.610	.436	-.017	212	.986	-.00176	.10259	-.20399	.20048
	Equal variances not assumed			-.017	76.888	.987	-.00176	.10642	-.21366	.21015
Barriers	Equal variances assumed	.234	.629	-.779	212	.437	-.06483	.08317	-.22878	.09912
	Equal variances not assumed			-.781	81.488	.437	-.06483	.08296	-.22988	.10022
Methods	Equal variances assumed	.376	.540	.678	212	.499	.25941	.38274	-.49505	1.01387
	Equal variances not assumed			.714	88.468	.477	.25941	.36314	-.46220	.98103

Table 51: correlation matrix of Pearson's r coefficient

Correlations					
		Advantages	Disadvantages	Barriers	Methods
Advantages	Pearson Correlation	1	-.348**	-.094	.088
	Sig. (2-tailed)		.000	.173	.200
	N	214	214	214	214
Disadvantages	Pearson Correlation	-.348**	1	.386**	-.008
	Sig. (2-tailed)	.000		.000	.906
	N	214	214	214	214
Barriers	Pearson Correlation	-.094	.386**	1	-.039
	Sig. (2-tailed)	.173	.000		.571
	N	214	214	214	214
Methods	Pearson Correlation	.088	-.008	-.039	1
	Sig. (2-tailed)	.200	.906	.571	
	N	214	214	214	214
**. Correlation is significant at the 0.01 level (2-tailed).					

Table 52: table of descriptive statistics for groups A & B

Group Statistics					
	Group	N	Mean	Std. Deviation	Std. Error Mean
Advantages	SEN	209	4.1377	.59039	.04084
	Mainstream	214	3.7660	.81530	.05573
Disadvantages	SEN	209	3.4182	.53597	.03707
	Mainstream	214	3.6093	.63357	.04331
Barriers	SEN	209	4.1108	.54681	.03782
	Mainstream	214	4.2117	.51437	.03516
Methods	SEN	209	7.6880	1.93115	.13358
	Mainstream	214	7.5972	2.36619	.16175

Table 53: table showing the independent samples t-test results between groups A & B

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Advantages	Equal variances assumed	25.772	.000	5.360	421	.000	.37171	.06935	.23540	.50802
	Equal variances not assumed			5.380	388.453	.000	.37171	.06909	.23587	.50755
Disadvantages	Equal variances assumed	5.830	.016	-3.347	421	.001	-.19116	.05712	-.30345	-.07888
	Equal variances not assumed			-3.353	412.636	.001	-.19116	.05701	-.30323	-.07910
Barriers	Equal variances assumed	.580	.447	-1.956	421	.051	-.10092	.05161	-.20235	.00052
	Equal variances not assumed			-1.954	417.999	.051	-.10092	.05164	-.20243	.00060
Methods	Equal variances assumed	5.613	.018	.432	421	.666	.09084	.21028	-.32248	.50416
	Equal variances not assumed			.433	408.186	.665	.09084	.20978	-.32154	.50322

26 June 2014

CONFIDENTIAL

Amirah AlShenaifi

Plymouth Institute of Education

Faculty of Arts and Humanities

Plymouth University

Nancy Astor Building

Dear Amirah

Application for Approval by Education Research Ethics Sub-committee

Reference Number: 13/14-56

Application Title: Saudi Female Teachers' Attitude towards Inclusion of SLDs Children in Primary Schools

I am pleased to inform you that the Education Research Ethics Sub-committee has granted approval to you to conduct this research. The committee would also offer the following advice, but you are not required to resubmit your application:

- To avoid any possible confusion, use SpLD instead of SLD.
- Use either "special educational needs" or "exceptional educational needs" in the survey. Do not use the terms interchangeably.

Please note that this approval is for three years, after which you will be required to seek extension of existing approval.

Please note that should any MAJOR changes to your research design occur which effect the ethics of procedures involved you must inform the Committee. Please contact Claire Butcher on (01752) 585337 or by email claire.butcher@plymouth.ac.uk

Yours sincerely

Professor Linda la Velle

Chair, Education Research Ethics Sub-committee -

Plymouth Institute of Education

Faculty of Arts and Humanities

APPENDIX A

Interview Guide English copy

* Interview Questions:

1-What is your educational background?

2- How many years of experience have you had in positions of supervision?

3- Have you ever participated in conferences that are concerned with special education in Saudi Arabia or abroad? If the answer is yes, please tell us the nature of your participation? Also, what subjects were addressed in the conferences?

4- Have you ever attended a training courses or lectures concerning the categories of children with special needs? If it is yes, please tell us which special cases you have focused on.

5 - Describe the inclusion room and resource room in your school?

6- What is the difference between these rooms?

7- Describe your experiences working in the inclusion room and/or resource room?

8- How are students with specific learning difficulties influenced by the inclusion room?

9- How are students, with specific learning difficulties influenced by resource room?

10- What are the barriers to learning in the inclusion room?

11- What are the barriers to learning in the resource room?

12- What are the roles and responsibilities of the teachers in the inclusion room?

13- What are the roles and responsibilities of the teachers in the resource room?

14- How would typical education students feel toward students who are removed from the mainstream room in order to work in the resource room?

15- How does the presence of students with learning difficulties affect other typical children when in the mainstream classroom?

16- Do you think inclusion is beneficial for children with learning difficulties?

17- Do you think inclusion is beneficial for typical children in the mainstream classroom setting?

18- What factors influence teachers' attitudes to inclusion?

19 - What are the teachers' perspectives of barriers to inclusion?

20 - What are the teachers’ preferred methods for improving inclusive practices?

APPENDIX B

Interview Guide Arabic copy

اسئلة المقابلة:

١. ماهو مؤهلك التعليمي؟

٢. كم عدد سنوات خبرتك الإشرافية؟

٣. هل شاركتيي في مؤتمرات تعليمية خاصة بالتربية الخاصة داخلية أو خارجية؟ إذا كان الجواب بنعم ماهي نوع مشاركتك؟ وماهي المواضيع المطروحة؟

٤. هل ادرتي دورات تدريبية أو القيتي محاضرات تعليمية عن فئات ذوي الإحتياجات الخاصة؟ إذا كان الجواب بنعم ماهي الفئة الخاصة التي سلطتي الضوء عليها ولماذا؟

٥. من وجهة نظرك كيف تصفين الفصل الدراسي العادي وغرفة المصادر في مدرسة التعليم العام؟

٦. ماهو الفرق بين الفصل الدراسي العادي وغرفة المصادر؟

٧. صفي تجربتك الشخصية أن وجدت في التعامل مع طالبة صعوبات التعلم داخل الفصل الدراسي العادي وخارجة في غرفة المصادر؟

٨. صفي تأثير الفصل الدراسي العادي على طالبة صعوبات التعلم؟

٩. صفي تأثير غرفة المصادر على طالبة صعوبات التعلم؟

١٠. ماهي العوائق التي تحول دون تلقي طالبة صعوبات التعلم جميع موادها الدراسية داخل الفصل الدراسي العادي؟

١١. ماهي العوائق التي تحول دون تلقي طالبة صعوبات التعلم جميع موادها الدراسية داخل غرفة المصادر؟

١٢. ماهي الأدوار والمسؤوليات الملقاة على عاتق معلمة التعليم العام داخل الفصل الدراسي العادي اتجاه طالبات التعليم العام والخاص؟

١٣. ماهي الأدوار والمسؤوليات الملقاة على عاتق معلمة التعليم الخاص داخل غرفة المصادر اتجاه طالبات التعليم الخاص؟

١٤. كيف تعبرين عن شعور طالبات التعليم العام اتجاه زميلاتهم طالبات صعوبات التعلم في غرفة المصادر؟

١٥. ماهو رأيك حول تأثير الدمج في مدارس التعليم العام على كلاً من طالبات التعليم العام والخاص؟

١٦. ماهي النقاط الإيجابية العائدة على طالبات الدمج في مدارس التعليم العام ؟

١٧. ماهي النقاط الإيجابية العائدة على طالبات التعليم العام في مدارس الدمج؟

١٨. كيف تجدين موقف معلمات التعليم العام والخاص اتجاه الدمج في مدارس التعليم العام؟

١٩. من خلال خبرتك الإشرافية ماهي العوائق التي تحول دون نجاح الدمج في مدارس التعليم العام؟

٢٠. ماهي مقترحاتك لأساليب تحسين سياسة الدمج داخل مدارس التعليم العام لكلاً من معلم التعليم العام والخاص؟

APPENDIX C

Questionnaire English copy

A survey of Saudi Female Teachers' Attitude towards Inclusion of Girls with Specific Learning Difficulties (SPLD) in Primary Schools

Dear Teacher

I am currently undertaking research into attitudes towards the inclusion of children with specific learning difficulties (SPLD) in mainstream schools. I am interested in the views of school SEN teachers and leading teachers with acknowledged expertise in SEN. I am particularly interested in finding out what teachers and experts think are the positive and negative aspects of inclusion in primary schools in Riyadh. I would like to ask teachers such as yourself to complete a questionnaire about this topic.

Inclusion is defined as the educational process of including with support all learners; including those experiencing significant special educational needs (SEN) such, visual impairment, hearing impairment, physical, intellectual disability, challenging behaviour, specific learning difficulties and autism in ordinary schools.

If you are happy to take part in this study, please could you sign the consent form below and complete the attached questionnaire. Please return the consent form and the questionnaire to Amirah Alshenaifi. You do not need to give your name as I am interested in general patterns rather than the attitudes of individuals. Please note that there are no correct answers; the best answers are those that honestly reflect your feelings. The data I collect will be used to inform my dissertation and may form the basis of published papers. Please keep a note of the number on your questionnaire. You have the right to withdraw from the study at any time by contacting Amirah Alshenaifi and asking for the questionnaire with your identification number to be either destroyed or returned to you. If you have any questions about this study please contact Amirah Alshenaifi by emailing amirah.alshenaifi@plymouth.ac.uk . Thank you very much for your consideration and support.

Many thanks for your consideration

Amirah Abdualaziz Alshenaifi

PhD Student in Special Education Needs

Plymouth University, UK

I have read the letter of information and I am happy to take part in the study about inclusion by completing the attached questionnaire.

ID Number _____School_____

Signed_____ Date_____

Section 1: Background

Please tick the appropriate box (√)

1-Age:

□21- 25 □26 – 30 □31 – 35

□36+

2- Teaching Experience:

□1-5 □6-10 □11-15 □16- 21 □ more than 21

3- Type of School:

□Regular School □unit in Regular School □Full inclusion

4- Please indicate your professional development in the field of SEN

□None □BC □Diploma □MA

5- Training in SEN □Yes □No

6- Have you had any contact time with students with SEN other than work time?

□No □Yes

Section 2: Perceptions about placement

In your view as a teacher what is the most appropriate setting or environment for teaching girls with SEN?

Disability	**Home**	**Residential Care**	**Special School**	**Special Class in MS**	**Inclusion + out class support**	**Inclusion + in class support**
Visual impairment						
Hearing impairment						
Physical Disability						
Intellectual disability						
Challenging behavior						
Learning difficulties						
Autism						

Section 3: Teacher Opinions

Please complete this section by ticking the box under the column that best describes your agreement or disagreement with the following statements. There are no correct answers; the best answers are those that honestly reflect your feelings. When referring to students with special educational needs, please keep the case study in mind.

1 = Strongly Agree 2 = Agree 3 = Undecided 4 = Disagree 5 = Strongly Disagree

1.	Girls with special needs have the right to be educated in the same classroom as typically developing girls	1	2	3	4	5
2.	Inclusion does not suit the needs of typically developing girls	1	2	3	4	5
3.	It is difficult to maintain order in a classroom that contains a mix of girls with exceptional education needs and children with average abilities	1	2	3	4	5
4.	Girls with special educational needs should be given every opportunity to function in an integrated classroom	1	2	3	4	5
5.	Inclusion can be beneficial for parents of girls with exceptional needs	1	2	3	4	5
6.	Parents of girls with exceptional needs prefer to have their child placed in an inclusive classroom setting	1	2	3	4	5
7.	Most special education teachers lack an appropriate knowledge base to educate typically developing girls effectively	1	2	3	4	5
8.	The individual needs of girls with disabilities CANNOT be addressed adequately by a mainstream education teacher	1	2	3	4	5
9	Most girls with exceptional needs are well behaved in integrated education classrooms	1	2	3	4	5
10	Inclusion is socially advantageous for girls with special needs	1	2	3	4	5
11	Girls with special needs will probably develop academic skills more rapidly in a special, separate classroom than in an integrated classroom. And positive	1	2	3	4	5
12	Girls with exceptional needs are likely to be isolated by typically developing girls in inclusive classrooms	1	2	3	4	5

1 = Strongly Agree	2 = Agree	3 = Undecided	4 = Disagree	5 = Strongly Disagree

13	The presence of girls with exceptional educational needs promotes acceptance of individual differences on the part of typically developing girls.	1	2	3	4	5
14	Inclusion promotes social independence among girls with special needs	1	2	3	4	5
15	Inclusion promotes self-esteem among girls with special needs	1	2	3	4	5
16	Girls with exceptional needs are likely to exhibit more challenging behaviours in an integrated classroom setting	1	2	3	4	5
17	Girls with special needs in inclusive classrooms develop a better self-concept than in a self-contained classroom	1	2	3	4	5
18	The challenge of a mainstream education classroom promotes academic growth among girls with exceptional educational needs	1	2	3	4	5
19	Isolation in a special class does NOT have a negative effect on the social and emotional development of girls prior to middle school	1	2	3	4	5
20	Typically-developing girls in inclusive classrooms are more likely to exhibit challenging behaviours learned from girls with special needs	1	2	3	4	5
21	Girls with exceptional needs monopolize teachers' time	1	2	3	4	5
22	The behaviours of girls with special needs require significantly more teacher-directed attention than those of typically developing girls	١	٢	٣	٤	٥
23	Parents of girls with exceptional educational needs require more supportive services from teachers than parents of typically developing girls.	١	٢	٣	٤	٥
24	A good approach to managing inclusive classrooms is to have a special education teacher be responsible for instructing the girls with special needs	١	٢	٣	٤	٥

Section 4: Teacher preparedness to implement inclusion according to disability type

Please indicate the level of preparedness that you feel you have in teaching students in full inclusive classroom setting. Circle one number of each statement.

1= extremely prepared	**2= Very prepared**	**3= Somewhat prepared**	**4= Not prepared**

Visual impairment	1	2	3	4
Hearing impairment	1	2	3	4
Physical	1	2	3	4
Intellectual disability	1	2	3	4
Challenging behaviour	1	2	3	4
Learning difficulties	1	2	3	4
Autism	1	2	3	4

Section 5: Barriers

Please read the following statements and indicate "the degree to which you feel each item represents a barrier to inclusion based on your own experiences and beliefs." Each item is rated on a scale from 1 (definitely a barrier) to 5 (definitely not a barrier).

1 = Strongly Agree 2 = Agree 3 = Undecided 4 = Disagree 5 = Strongly Disagree

١	Inadequate pre-service preparation of teachers	١	٢	٣	٤	٥
٢	Overload on the part of teachers	1	2	3	4	5
٣	Classrooms do not accommodate girls with disabilities	1	2	3	4	5
٤	Absence of regulations that support inclusion	1	2	3	4	5
٥	Teachers' negative attitudes	1	2	3	4	5
٦	Resistance among administrators	1	2	3	4	5
٧	Non-acceptance by other parents	1	2	3	4	5
٨	Little Knowledge about special educational needs	1	2	3	4	5
٩	Lack of experience regarding Inclusion	1	2	3	4	5
١٠	Class size or large teacher/pupil ratio	1	2	3	4	5
١١	Limited time for teachers to give sufficient attention to girls with SEN	1	2	3	4	5
١٢	Lack of equipment and appropriate educational materials	1	2	3	4	5
١٣	Non-acceptance by parents of SEN girls	1	2	3	4	5
١٤	Behaviour management	1	2	3	4	5
١٥	Rigidity in curriculum design and examination	1	2	3	4	5
١٦	Lack of regard for diversity of interests and abilities	1	2	3	4	5
١٧	Inadequate in-service training for teachers	1	2	3	4	5
١٨	Non-acceptance by other girls	1	2	3	4	5
١٩	The absence of educational policy for inclusion in Saudi Arabia or the absence clear vision for change	1	2	3	4	5
٢٠	Inadequate funding	1	2	3	4	5

Section٦ : Methods for improving inclusive practices

Please rank the following 10 methods for improving inclusive practices in terms of their usefulness from best (1) to least (10)

Methods	**Best**								**Least**	
Direct teaching experience with girls with disabilities	1	2	3	4	5	6	7	8	9	10
Observation of other teachers in inclusive settings	1	2	3	4	5	6	7	8	9	10
Inservice training/workshops	1	2	3	4	5	6	7	8	9	10
Consultation activities with other teachers, specialists and parents	1	2	3	4	5	6	7	8	9	10
Exposure to girls with disabilities	1	2	3	4	5	6	7	8	9	10
Discussion groups on inclusive practices	1	2	3	4	5	6	7	8	9	10
University coursework	1	2	3	4	5	6	7	8	9	10
Research involvement	1	2	3	4	5	6	7	8	9	10
Collaborative experiences with university faculty	1	2	3	4	5	6	7	8	9	10
Independent reading	1	2	3	4	5	6	7	8	9	10

Section٧ : What do you believe are the advantages and disadvantages of using a special educational resource room to support inclusion?

……
……

From your personal view what are the differences between the attitudes of special education needs teachers and regular teachers؟

……
……

Thank you very much for completing this questionnaire

APPENDIX D

Questionnaire Arabic copy

زميلتي المعلمة:

أنا طالبة دكتوراه من جامعة بليموث في بريطانيا . أرغب في إجراء بحث بعنوان" **وجهات نظر المعلمات السعوديات اتجاه دمج طالبات صعوبات التعلم في مدارس التعليم العام الإبتدائية في المملكة العربية السعودية** ". والتعرف على وجهة نظرك وإتجاهاتك الإيجابية والسلبية حول دمج طالبات صعوبات التعلم في فصول التعليم العام الإبتدائية. لغرض إجراء دراسة حول بعض المتغيرات التي يجب أخذها بعين الإعتبار عند تطوير برامج دمج طالبات صعوبات التعلم في مدارس التعليم العام الإبتدائية. ومن أهم هذه المتغيرات هي وجهة نظرك كمعلمة صعوبات تعلم حيث يقع عليكِ العبء الأكبر في العملية التعليمية.

عزيزتي المعلمة أرجوا منكِ أن تختاري بكل دقة وأن تقرئين العبارة كاملةً قبل أن تختاري، وأحب أن أذكرك بأنه لا توجد هناك عبارة صحيحة وأخرى خاطئة، فكلها وجهات نظر، ووجهة نظرك سيتوقف عليها إتخاذ قرار يخصك كمعلمة ويخص العملية التربوية بأكملها. وبإمكاني تزويدك بملخص نتائج الدراسة إذا رغبتي في ذلك.

مفهوم الدمج: هو تعليم الطلاب والطالبات ذوي الإحتياجات التعليمية الخاصة سوياً جنباً إلى جنب مع أقرانهم العاديين في المدارس العامة. والمقصود بذوي الحاجات التعليمة الخاصة "المعاقين " فكرياً ،بصرياً، سمعياً ، حركياً ، المضطربون سلوكياً، صعوبات التعلم، التوحد.

شاكرةً ومقدرةً لكِ تعاونكِ وجهدكِ المثمر،

الباحثة

أميرة عبدالعزيز الشنيفي

جامعة بليموث، بريطانيا

القسم الأول:

بيانات شخصية:

العمر: ✎ 21- ٢٥ ✎ ٢٦- ٣٠ ✎ ٣١- ٣٥ ✎ أكبر من ٣٦

سنوات الخبرة التدريسية:

✎ أقل من سنتين ✎ ٣-٥ ✎ ٦- ١٠

✎ ١١-١٥ ✎ ١٦-٢٠ ✎ أكثر من ٢٠

نوع المدرسة:

✎ مدرسة عادية (بدون تلاميذ تربية خاصة).

✎ مدرسة عادية + فصول تربية خاصة ملحقة.

✎ مدرسة شاملة (دمج داخل الفصل).

هل حصلت على أي مؤهل في التربية الخاصة؟

✎ لا ✎ دبلوم ✎ بكالوريوس ✎ ماجستير

هل تلقيت دورات تدريبية عن الفئات الخاصة؟

✎ نعم ✎ لا

هل لديكِ أوقات تشتركين فيها مع ذوي الاحتياجات الخاصة خارج وقت المدرسة؟

✎ نعم ✎ لا

القسم الثاني:

من واقع خبرتك كمدرسة ما هو المكان الأفضل لتعليم طالبات ذوي الأحتياجات الخاصة. فيما يلي مجموعة من البدائل، من فضلك اختاري المكان المناسب من وجهة نظرك، مع العلم انه لا توجد إجابة صحيحة وأخرى خاطئة، المهم أن تعبر الإجابة عن وجهة نظرك.

مكان الدراسة / نوع الإعاقة	البيت	دار الرعاية	مدرسة خاصة	فصل خاص في مدرسة عادية	دمج في فصول مدرسة عادية + مساعدة خارج الفصل (غرفة المصادر)	دمج في فصول مدرسة عادية + مساعدة داخل الفصل
إعاقة بصرية						
إعاقة سمعية						
إعاقة بدنية أو حركية						
إعاقة عقلية						
اضطرابات سلوكية						
صعوبات التعلم						
التوحد						

القسم الثالث: رأي المعلمات نحو الدمج

فيما يلي مجموعة من العبارات تهدف إلى التعرف علي رأيك نحو الدمج، والمطلوب قراءة كل عبارة ثم التعبير عن رأيك فيها بكل صراحة و موضوعية حيث أنه لا توجد إجابة صحيحة وأخرى خاطئة.

من فضلك حددي مدى موافقتك على هذه العبارات عن طريق اختيار الرقم المناسب لكل عبارة من ١ إلى ٥

١= موافقة بشدة	٢= موافقة	٣= غير متأكدة	٤= غير موافقة	٥= غير موافقة بشدة

١	**الطلاب ذوي الاحتياجات الخاصة لهم الحق في تلقي تعليمهم في نفس الفصول الدراسية لأقرانهم العاديين.**	١	٢	٣	٤	٥
٢	**في معظم البلدان النامية يعتبر الدمج من البرامج الغير مرغوب فيها لتعليم الطلاب ذوي الاحتياجات الخاصة.**	١	٢	٣	٤	٥
٣	**من الصعب الحفاظ على النظام داخل الصف الذي يحوي مزيج من الأطفال ذوي الاحتياجات التعليمية الخاصة و الأطفال العاديين.**	١	٢	٣	٤	٥
٤	**الطلاب ذوي الاحتياجات الخاصة يجب أن يعطوا كل الفرص لكي يشاركوا في الفصول العادية، قدر الإمكان.**	١	٢	٣	٤	٥
٥	**يعتبر الدمج مفيداً لأولياء أمور ذوي الاحتياجات الخاصة.**	١	٢	٣	٤	٥
٦	**يفضل أولياء أمور ذوي الأحتياجات الخاصة تعليم طفلهم في نفس البيئة التعليمة الخاصة بالطلاب العاديين.**	١	٢	٣	٤	٥
٧	**يفتقر معظم معلمي التربية الخاصة إلى القاعدة المعرفية المناسبة في تعليم الطلاب ذوي الاحتياجات الخاصة بشكلاً فعال.**	١	٢	٣	٤	٥
٨	**يصعب على معلم الصف العادي معرفة الاحتياجات الفردية الخاصة لطلاب ذوي الاحتياجات الخاصة بشكلاً فعال.**	١	٢	٣	٤	٥
٩	**يساعد الدمج على تحسين سلوكيات طلاب ذوي الاحتياجات الخاصة في الفصول العامه (الدمج).**	١	٢	٣	٤	٥
١٠	**الدمج مفيد اجتماعيا للأطفال ذوي الاحتياجات الخاصة.**	١	٢	٣	٤	٥
١١	**الطالب ذو الاحتياجات الخاصة ربما تتطور مهاراته الأكاديمية بسرعة في قاعات الفصول الخاصة أكثر منها في الفصول العامة(الدمج). وايضاً إيجابية**	١	٢	٣	٤	٥

١٢	إن متطلبات التلاميذ ذوي الاحتياجات الخاصة يمكن أن تقدم بأفضل وسيلة من خلال البرامج الخاصة، المعزولة.	١	٢	٣	٤	٥

١= موافقة بشدة	٢= موافقة	٣= غير متأكدة	٤= غير موافقة	٥= غير موافقة بشدة

١٣	اختلاط الطلاب ذوي الاحتياجات الخاصة سوف يعزز القبول بالاختلافات من ناحية الطلاب الآخريين.	١	٢	٣	٤	٥
١٤	الدمج يعزز الاستقلال الاجتماعي بين أطفال ذوي الاحتياجات الخاصة.	١	٢	٣	٤	٥
١٥	الدمج يعزز احترام الذات لدى أطفال ذوي الاحتياجات الخاصة.	١	٢	٣	٤	٥
١٦	الدمج يعزز التحدي لدى أطفال ذوي الاحتياجات الخاصة في الفصول الدراسية العادية.	١	٢	٣	٤	٥
١٧	يتطوير مفهوم الذات بشكل أفضل لدى أطفال ذوي الاحتياجات الخاصة في الفصول الدراسية العادية أكثر مما كانت عليه في الفصول الخاصة.	١	٢	٣	٤	٥
١٨	التحدي المتمثل في الصفوف العادية سيعزز النمو الأكاديمي للأطفال ذوي الاحتياجات التعليمية الخاصة.	١	٢	٣	٤	٥
١٩	العزل في الفصول الخاصة ليس له أثر سلبي على التطور الاجتماعي والعاطفي لطالب ذوي الاحتياجات الخاصة.	١	٢	٣	٤	٥
٢٠	الدمج يفيد الطلاب العاديين في فهم سلوكيات أطفال ذوي الاحتياجات الخاصة.	١	٢	٣	٤	٥
٢١	الأطفال ذوي الاحتياجات يحتكرون وقت المعلم داخل الفصل .	١	٢	٣	٤	٥
٢٢	اهتمام المعلم بضبط سلوكيات الطالب ذوي الاحتياجات الخاصة داخل الفصل أكثر بكثير من الأهتمام بضبط سلوكيات أقرانه العاديين.	١	٢	٣	٤	٥
٢٣	يدعم المعلم أولياء أمورالأطفال ذوي الاحتياجات التعليمية الخاصة بخدمات أكثر من أولياء أمور الأطفال العاديين. وايضاً إيجابية	١	٢	٣	٤	٥
٢٤	النهج الجيد لإدارة الفصول الدراسية العامة (الدمج) هو أن يكون هناك معلم تربية خاصة مسؤولا عن توجية أطفال ذوي الاحتياجات الخاصة داخل الفصل.	١	٢	٣	٤	٥

القسم الرابع: استعداد المعلمة لتطبيق الدمج حسب نوع العجز

من فضلك أشيري إلى مستوى الاستعداد الذي تشعرين به نحو تعليم طالبات ذوي الأحتياجات الخاصة في الفصول الدراسية الشاملة (الدمج).

ضعي دائرة على الرقم في كل فقرة حسب المقياس التالي:

١ = مستعد جداً	٢ = مستعدة	٣ = مستعدة نوعاً ما	٤ = غير مستعدة

م	نوع العجز	مدى الاستعداد			
١	إعاقة بصرية	1	2	3	4
٢	إعاقة سمعية	1	2	3	4
٣	إعاقة بدنية أو حركية	1	2	3	4
٤	إعاقة عقلية	1	2	3	4
٥	اضطرابات سلوكية	1	2	3	4
٦	صعوبات التعلم	1	2	3	4
٧	التوحد	1	2	3	4

القسم الخامس: المعوقات

فيما يلي مجموعة من المعوقات لعملية الدمج من فضلك اقرائي كل عبارة ثم حدد يمدى موافقتك على كونها تمثل عقبة أو معوقاً في سبيل تحقيق الدمج عن طريق وضع دائرة حول الرقم الذي تجيدينه مناسباً حسب المقياس التالي:

١= موافقة بشدة	٢= موافقة	٣= غير متأكدة	٤= غير موافقة	٥= غير موافقة بشدة

١	**تأهيل المعلمات قبل الخدمة غير كاف.**	١	٢	٣	٤	٥
٢	**زيادة الأعباء على كاهل المعلمات.**	١	٢	٣	٤	٥
٣	**الفصول الدراسية لا تلائم احتياجات الطلاب ذوي الاحتياجات الخاصة.**	١	٢	٣	٤	٥
٤	**عدم وجود لوائح وتشريعات وقوانين تدعم عملية الدمج.**	١	٢	٣	٤	٥
٥	**اتجاهات المعلمات السالبة نحو الدمج.**	١	٢	٣	٤	٥
٦	**مقاومة المدراء والمسؤولين لعملية الدمج.**	١	٢	٣	٤	٥
٧	**عدم تقبل أولياء أمور الطلاب العاديين لدمج ذوي الاحتياجات الخاصة مع أبنائهم.**	١	٢	٣	٤	٥
٨	**قلة معلومات المعلمات في المدارس العادية بالاحتياجات الخاصة لطالبات ذوي الأحتياجات الخاصة.**	١	٢	٣	٤	٥
٩	**قلة خبرة المدرسات بالدمج أو عدم وجود خبرة تدريس مباشرة مع طالبات ذوي الأحتياجات الخاصة.**	١	٢	٣	٤	٥
١٠	**زيادة عدد الطالبات داخل الفصل الدراسي.**	١	٢	٣	٤	٥
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القسم السادس: طرق تحسين عملية الدمج

من فضلك قومي بتحديد (النسبة) لطرق العشر التالية مبينة مدى فائدتها في تحسين عملية الدمج من الأفضل(١) إلى الأقل(١٠) في نظرك.

	الطريقة	**أفضل**								**أقل**	
١	**الخبرة في مجال تدريس طالبات ذوي الأحتياجات الخاصة**	١	٢	٣	٤	٥	٦	٧	٨	٩	١٠
٢	**ملاحظة طريقة تعامل المعلمات في فصول الدمج**	١	٢	٣	٤	٥	٦	٧	٨	٩	١٠
٣	**التدريب أثناء الخدمة/ ورش العمل**	١	٢	٣	٤	٥	٦	٧	٨	٩	١٠
٤	**أنشطة التشاور بين المعلمات وأولياء أمور طالبات ذوي الأحتياجات الخاصة**	١	٢	٣	٤	٥	٦	٧	٨	٩	١٠
٥	**التعامل مع أطفال ذوي الأحتياجات الخاصة**	١	٢	٣	٤	٥	٦	٧	٨	٩	١٠
٦	**مجموعة المناقشات حول ممارسة الدمج**	١	٢	٣	٤	٥	٦	٧	٨	٩	١٠
٧	**الدورات الجامعية**	١	٢	٣	٤	٥	٦	٧	٨	٩	١٠
٨	**تطور البحوث**	١	٢	٣	٤	٥	٦	٧	٨	٩	١٠
٩	**الخبرات التعاونية مع هيئة التدريس في الجامعة**	١	٢	٣	٤	٥	٦	٧	٨	٩	١٠
10	**القراءات المستقلة**	١	٢	٣	٤	٥	٦	٧	٨	٩	١٠

القسم السابع:

ماهي مزايا ومساوئ استخدام غرفة المصادر في مدارس التعليم العام لدعم الدمج؟

.....
.....

من وجهة نظرك الشخصية، ماهي الأختلافات بين وجهات نظر معلمات التربية الخاصة والمعلمات العاديات حول موضوع الدمج؟

.....
.....

شاكرة لسعادتكم حسن تعاونكم

RESEARCH WITH PLYMOUTH UNIVERSITY

Dr McKenzie

217 NAB
Plymouth University
UK
22/09/14

Re: Amirah Alshenaifi

To whom it may concern

I am the Director of Studies for Amirah Alshenaifi's Ph.D., at Plymouth University, UK. Amirah has reached the point in her studies where she needs to collect data. Her study explores **Saudi Female Teachers' Attitudes towards Inclusion of Girls with Specific Learning Difficulties (SLD) in Primary Schools.**

In order to collect her data, Amirah will need to travel to Saudi Arabia on the 1st of November 2014, returning on the 1st of February 2015. This is an important piece of work for Amirah and I give my support and permission for her to collect data in Saudi Arabia during this time.

Yours Sincerely

Dr Rebecca McKenzie
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Plymouth Institute of Education
Plymouth University
UK

المملكة العربية السعودية
وزارة التربية والتعليم
٢٨٠
الإدارة العامة للتربية والتعليم بمنطقة الرياض
إدارة التخطيط والتطوير

وزارة التربية والتعليم
Ministry of Education

الإدارة العامة للتربية والتعليم بمنطقة الرياض
General Administration of Education in Riyadh
إدارة التخطيط والتطوير بنات

الرقم : ٣٦٣٧٧٧٤
التاريخ : ١٤٣٦/٠١/٠٤
المرفقات : -

"تسهيل مهمة بحث "

اسم الباحثة / الجامعة	أميرة عبدالعزيز الشنيفي / جامعة بليموث ببريطانيا .
الغرض من الدراسة	متطلب للحصول على درجة / الدكتوراة.
عنوان الدراسة	(وجهات نظر المعلمات السعوديات اتجاه دمج طالبات صعوبات التعلم في مدارس التعليم العام الابتدائية في المملكة العربية السعودية)
نوع التسهيل	استيفاء الأداة على عينة من معلمات المدرسة .

المكرمة مديرة المدرسة الابتدائية (المطبقة لبرنامج صعوبات التعلم (الدمج) **حفظها الله**

السلام عليكم ورحمة الله وبركاته **وبعد ،،**

بناءً على تعميم معالي وزير التربية والتعليم رقم ٥٥/٦١٠ وتاريخ ١٤١٦/٩/١٧هـ بشأن تفويض الإدارات العامة للتربية والتعليم بإصدار خطابات السماح للباحثين بإجراء البحوث والدراسات ، وبناءً على تفويض مدير عام إدارة التربية والتعليم إدارة التخطيط والتطوير في الخطاب ذي الرقم ١١/٣٣٦٧٤٨٢٣والتاريخ ١٤٣٣/٤/١٤هـ بشأن تسهيل مهام الباحثين والباحثات ، وحيث تقدمت إلينا الباحثة (الموضحة بياناتها أعلاه) بطلب إجراء الدراسة ، نأمل تسهيل مهمتها ، مع ملاحظة أن الباحثة تتحمل كامل المسؤولية المتعلقة بمختلف جوانب البحث ، ولا يعني سماح الإدارة العامة للتربية والتعليم موافقتها بالضرورة على مشكلة البحث أو على الطرق والأساليب المستخدمة في دراستها ومعالجتها .

شاكرين طيب تعاونكم .

مدير إدارة التخطيط والتطوير

سعود بن راشد آل عبداللطيف

ص/ لكل مكتب تربية وتعليم .
ص/ قسم الدراسات والبحوث .

نموذج(٥/٣)

البريد الإلكتروني planingm@rge.gov.sa/ al-takhteet@hotmail.com هاتف ٤٠٢٠٤٣٨ - فاكس ٤٠٢٧٠٥٨ - سنترال ٤٠٥٥٩٥٠ تحويلة ١٤٠٤

Interview Transcription

Following is a transcription of an interview with a participating teacher who specialised in working with special-needs girls in resource rooms - Ms Maram (not her real name). It was recorded in a school in mid-2014. The interview was conducted after the participant had given her approval for me to make a written record of our conversation.

AA. Alsalamualikum wrahmatuallah wbarakatu

M.A. Alsalamualikum wrahmatuallah wbarakatu, welcome

AA. First, I would like to thank you for your participation in my research and for agreeing to meet me. I would like to know if you would allow me to make a voice record during the interview or not.

MA. I would not want a sound recording of me made for personal reasons.

AA. It's okay, but please excuse me if it takes me a while to make notes about our conversation.

MA. Take your time, you are welcome.

AA. Thank you

AA. First, I would like to introduce myself, I am Amirah Abdulaziz Al-Shenaifi; I am a lecturer in the Faculty of Education, Special Education Department, of Princess Noura Bint Abdulrahman University. Currently, I am studying for a PhD at Plymouth University in the Faculty of Education, Department of Special Education.

MA. I wish you all the luck.

AA. Thank you

AA. My research topic focuses on the policy and practice of inclusion of students with specific learning difficulties in mainstream primary girls' schools in Riyadh, Saudi Arabia. I am seeking information specifically from the point of view and from the experiences of teachers. As a former teacher with experience in learning difficulties, and currently supervising special education teachers, I would like to discuss with you some important points in this area in order to support my research. I would like to benefit from your experience in dealing with teachers and students of special education.

MA. Thanks for addressing this issue… (Inclusion) is very important and is concerned with an important segment in the community and this segment needs all possible support from supervisors, specialists, and teachers. As you know, our government has given importance and material support to implementing inclusion, and it is our duty to care for children with special needs and to help them. Inclusion strengthens their confidence and enhances their presence in the schools … they need to be taught according to impairment and educational need.

AA. Yes, I agree with you. I would also like to remind you that there are no incorrect statements in this discussion, all views are valid. As I mentioned in my notes to you, I will refer to you with fictitious name to ensure confidentiality and anonymity.

MA. Thank you for this clarification and I wish you luck.

AA If you wish me to provide you with a summary of the results of the study, I will be glad to do so.

MA. I will be glad to meet you too.

AA. Shall we start; Mrs. Maram What is the most recent qualification you have obtained?

MA. Bachelor of Special Education, specializing in working with children who have learning disabilities. I have worked for ten years with students who have learning difficulties, and I was appointed as an educational supervisor three years ago.

AA. I wish you success. From your point of view, is the main difficulty you encounter in your work concerned with teaching and dealing with students who have learning difficulties, or is it in guiding and supervising special education teachers and students of special education. How did you undertake your work so as to address those difficulties?

MA. When I was a teacher:

- I ensured that I was close to my students.
- I dealt with them on daily basis
- I made a practice of communicating with their families
- I concentrated on making sure that they made academic progress.
- I tried to foster their self-confidence.

MA. After I was appointed a supervisor I found the work very demanding. I became responsible for overseeing the activities of a number of female teachers. This meant that I

had to direct the teachers to ensure that they were using appropriate teaching methods, and I checked on the status and progress of the special-needs girls.

AA. From your experience it is evident to me that you are a good representative of the area of special-needs education.

MA. Thank you for your consideration.

AA. Professor Maram I would like to know, did you participate in internal and external educational conferences for private education.

MA. At the beginning of my career, I attended the following:

- Workshops for teachers.
- Internal conferences with other teachers in similar educational settings. I was very passionate about improving my own methods.
- I organized a workshop in Riyadh on ways to teach children with learning difficulties.
- I participated in an educational course on the benefits of story-telling in teaching children who have learning difficulties.

AA. My research topic for my master's thesis was on the topic of the effects of education on girls with dyslexia, and one of the themes of my work was the use of stories for attracting the attention of students and helping them to learn and enjoy in an unconventional educational framework.

MA. This is true and I agree with you. It is important to use suitable learning methods and strategies, such as stories, when working with special-needs children in an inclusive classroom setting.

AA. Right. And what is the reason for this?

MA. There are several reasons:

1. The large number of girls in the classroom is challenging. It is difficult for a teacher to manage all the children while giving close attention to those with special needs.
2. Some teachers lack experience when working with special needs girls.

3. There is a lack of instructional courses and training for teachers who have inclusive classes.
4. Each student needs to have an individual educational plan. It takes time to develop plans for each child.
5. Some teachers do not use appropriate education strategies for their students.

AA. What is the appropriate learning environment for children who have learning impairments? Is it mainstream classroom or a resource room?

MA. Both environments are academically and socially supportive, but it depends on the particular needs of each child. The mainstream classroom offers the opportunity for all girls to participate with others. Another benefit is that inclusion strengthens social relationship between students. However, many mainstream settings lack access to a special education teachers or a teaching assistants.

The resource room is very important because it offers individual learning, attention to each child by a specialist teacher, and the opportunity for academic development that would not be possible in a busy mainstream class.

AA. From your experience as a teacher in a resource room, I would like to describe your experiences when dealing with special-needs students in and out of the classroom, and also the roles of the family and management in supporting your work.

MA. My teaching days have many challenges, and I work closely with my girl students and their families. Most families are fully understanding of the importance and progress of their daughter's education and are eager to help her. However, a particular concern is that for many families their daughter’s disability is a cause of embarrassment.

AA. Who is responsible for changing community attitudes about special needs children?

MA. Responsibility does not lie with one person. The educational process is interrelated and should include the following:

- Family; that is parents and siblings.
- Those in the school administration and general education teachers.

- All sectors of the wider community; all parts of society need to be involved because all children are integral parts of society and have equal rights to education as their peers.
- Community attitudes affect not only the students with special needs but also the mainstream students in inclusive schools.

AA. How have been your relationships with those who endorse inclusion and those who insist on separation?

MA. I have worked with a variety of mainstream and special education teachers. I have found it difficult to deal with some mainstream classroom teachers who oppose the idea of inclusion and who dislike having to deal with special needs girls in the classrooms. However, school administrators obliged mainstream teachers to work closely with specialist teachers. Some mainstream teachers experience difficulty when encountering students with different and special needs, but I offer guidance when they encounter inclusive classrooms. I encourage teachers to attend special educational and training courses,

AA. Who is responsible for setting up these courses and encouraging participation?

MA. Such courses are convened by the Ministry of Education and represented by the Department of Special Education. Some school departments are active and keen to educate their teachers in methods of inclusive practices.

AA. Based on your career as a special education supervisor and your visits to schools which apply inclusive practices, what are the main obstacles that prevent special-needs students from learning academic subjects in mainstream classrooms?

MA. Firstly, the number of children in typical classes prevents teachers from giving much personalized attention to students with disabilities. This situation is made more challenging because few classrooms have teaching assistants who would otherwise free-up the teacher to provide help to individuals. Another disadvantage is that within mainstream classes special-needs girls are often unable to participate fully due to shyness and their lack of self-confidence.

AA. Then, based on these obstacles, do you support the idea that special-needs students should receive all their education in the resource room?

MA. Of course not. Participation in mainstream classes makes students feel that they are fully part of the school and that, with some help, they can overcome their difficulties.

AA. So, in your opinion, what is the role of the teacher of ensuring the integration of both public and private students?

MA. The teacher must take into consideration the individual differences of all students regardless of their educational status. It is the teachers who are responsible for fostering the spirit of partnership among students.

AA. How can the teacher do this?

MA. By ensuring that all children are fully included during all curricular activities. The mainstream teacher can encourage the students to cooperate and participate, and this can be aided by dividing them into small groups so that they get to know each other. Another aspect is to collaborate with the resource-room teacher to ensure that, if possible, the special needs girls can benefit from attending lessons on the mainstream room.

AA. It is true that cooperation between teachers is very important. Is the role of the mainstream teacher in fostering inclusive practices as important as that of the resource room teacher?

MA. Yes, the resource room teacher is knowledgeable about inclusive practices and has an awareness of students' needs.

- She is the person who formulates the individual education plan with the help of the regular classroom teacher.
- The specialist teacher is responsible for addressing the particular needs of each girl who attends the resource room, and the specialist usually collaborates with the mainstream teacher to elevate the student's confidence in the classroom and with her peers.
- The specialist should apply instructional practices which take account of the needs of each student.

AA. Do you see the collaboration between teachers reflected in the progress of students?

MA. Of course; whenever there is close cooperation it is evident in the learning achievements of the girls.

AA. In your opinion, what is the feeling of mainstream students towards their female peers who leave the mainstream class to attend the resource room?

MA. General education students accept that some girls with learning disabilities need to attend the resource room. In general they show acceptance and encouragement of the special-needs girls rather than ridicule.

AA. What is your opinion of this difference in attitudes?

MA. The common factors that can influence children's learning are family, school, and community. These are complementary and strongly influence the educational process.

AA. How can negative attitudes be treated? This is an important point because they hinder the educational process and affect the psychological wellbeing and the learning of special-needs students.

MA. Outreach is one approach for addressing this issue. This usually involves community awareness activities by the management of the school and its teachers. Another technique for breaking down misunderstandings is mainstream students to visit resource rooms so that they can see for themselves.

AA. According to what was mentioned above, do you see that inclusion has had an impact on both mainstream and special education students?

MA. I stress that there has been a significant impact of inclusion in preventing the isolation and introversion of special education students. It allows them to interact with their fellows and to form relationships and social friendships within and outside the classroom. Also, inclusion helps special-needs students to accept their difficulties and develop the self-confidence to develop academically. I have found that mainstream students generally accept the difference of her special-education colleagues interact with them as they would others.

AA. From your experience of both public and private schools, are there differences in attitudes in regard to inclusive practices in public and private education?

MA. There are both similarities and differences, and one does not stand out above the other as far as inclusion is concerned.

AA. What is the reason and the obstacle in this?

MA. In our schools, inclusion takes time to be adopted. There are many points to be considered. For example, we need to ask, what is inclusion? What is its impact? What are its advantages and disadvantages? What might be the educational and social return for each party of the educational process? Inclusion will occur only if there is awareness by school administration and mainstream teachers, mainstream students, special education teachers, and parents. One hindrance is the shortage of training courses for general and special-education teachers. Another is that there are no assistant teachers within inclusive classrooms. In some schools

there is a lack of facilities for both mainstream and special education teachers, and sometimes there is a failure to ensure that students interact with each other.

AA. Finally, from your point of view, how could inclusive practices be improved by interactions and participation between students?

MA. The more we overcome the environmental, personal, and social barriers that I mentioned previously, the more readily will special needs students be included in all aspects of learning in mainstream classes.

AA. Finally, I would like to thank you for giving me the opportunity to conduct this interview and to benefit from your knowledge and expertise. Once again, I would like to remind you that I can provide you with a summary of the study results if you would like me to do so.

MA. You are welcome, this is our duty and I will be pleased to read your results. I wish you success.

AA. Thank you.

Note on Interviews:

Having been granted approval by the relevant school and Ministry authorities, in mid-2014 I visited several schools for the purpose of collecting information by questionnaire from special and mainstream education teachers. I met with some special education supervisors in their resource rooms during their working day; I introduced myself and explained the purpose and nature of my research, and I asked if I could interview them about their experiences in respect of inclusion. The subsequent interviews lasted about 50-60 minutes, the teachers being assured of anonymity and confidentiality. The supervisors did not want me to audio-record our discussion and I respected their need for anonymity. I made written notes as each interview progressed, and at the end of the interview I wrote full notes about the responses.

Resource Rooms in Saudi Schools

Following is a description of typical resource rooms which are located within the precincts of public schools. The rooms are provided as part of the process of inclusion in schools. It should be noted that the design, layout, content, and operations of the rooms are similar to those recommended for use in the United States. Odeh (2008) describes the ideal requirements for resource rooms, and Al-Zoubi and Rahman (2012) describe resource rooms currently in use in Saudi Arabia.

Room specifications:

The rooms vary between schools, but teachers aim to make the rooms attractive for the girls and that entails having features that help attract and interest students. Also, they are structured to allow students to move freely and engage in various activities. Attention is paid to the lighting so that it is adequate, and bright colours for the walls and furniture are used to make the rooms interesting. Because of Riyadh's hot climate rooms are air conditioned and well ventilated, and to ensure a quiet setting for the girls to learn the floors are carpeted. Furniture is always of good quality, it is of a size appropriate to young girls, and usually it is moveable so that it can be reconfigured to suit particular lessons and to suit group or individual learning.

Display panels:

Resource rooms contain panels, such as display and white boards, which are used for lessons. They illustrate the work to be learned and they can be used to highlight the children's achievements. Some whiteboards and panels are magnetic so that items can be attached. The boards are positioned at a height suited to the students' size to make it easy for them to see and use when completing the work. Panels which display children's work can help motivate the students because it fosters a sense of pride and achievement; this is important because, as noted in the thesis, some SEN children are inhibited by feelings of negative self-worth, and every effort should be made to lift their sense of confidence.

In some situations, mirrors are used, particularly to aid those with a speech impediment.

Technology

The many forms of electronic technology now available have assumed a central role in most aspects of education, and they are used in resource rooms just as they are used in mainstream rooms. Computers, tablets, televisions, audio-recorders, video-recorders, and interactive boards are now commonplace in resource rooms. They are especially useful for students to acquire basic numeracy and literacy, and to encourage thinking and reasoning skills by way of the many games, puzzles and interactive activities available.

Other learning aids

Not all learning is done with electronic devices. Indeed, much use is made of traditional items such as exercise books, pencils, coloured crayons, coloured paper, scissors, glue, games, building blocks, and similar craft materials. These aids are usually used to assist girls to assemble items, to use numbers, to learn patterns, and to develop manual dexterity. These items are especially useful as learning activities for many SEN children who are unable to benefit from formalized teacher-centred instruction.

When is the student enrolled in the resource room?

As detailed in the thesis, inclusion in Saudi schools entails each child attending mainstream classes as a matter of course, and children are referred for specialist assistance only if they are unable to learn adequately in the mainstream setting. When considering whether a girl should be classified as having special needs, a number of factors are taken into account and a number of processes are involved, the main ones being as follows:

Specialist teachers apply diagnostic tests to identify the child's educational strengths and weaknesses. The findings of the tests as the basis of the child's individualised educational plan – that is, the plan that details the specific areas of learning assistance required by the child.

Wherever possible teachers endeavour to identify factors that might be affecting the performance of the child. The plan should indicate educational objectives, behavioural goals, and the estimated time required to achieve the goals. It is standard practice for teachers and principals to communicate closely with parents; that is, to consult and work collaboratively with families.

In the schools which I visited for this research project every effort was made to ensure that the resource rooms were welcoming places which the girls would enjoy attending. As shown in the photographs at the end of the appendices, the rooms are bright, colourful, attractive, and decorated in ways that are interesting to young children.

Sections of resource rooms:

Resource rooms in Saudi schools are expected to cater for a variety of special needs, and at any given time different lessons are being provided for several children (perhaps three or four) who have different learning needs. Consequently, the rooms are usually divided into separate sections. Often the rooms are divided by moveable panels into discrete units, and the units might be equipped with items suitable for particular subjects. For example, most resource rooms have a unit for teaching Arabic language skills (reading, expression and

writing); a unit for teaching social skills and behaviour; a section for children who have speech issues; another for helping develop motor skills; and yet another with equipment to teach the use of computers (and similar devices).

The following table provides a general overview of the enrolments, staffing, and status/classification of students in Riyadh government schools in 2013/2014.

STATISTICS OF SCHOOLS AND EMPLOYEES OF EDUCATIONAL DEPARTMENT IN RIYADH BY GOVERNMENT AND TYPE OF EDUCATION

٢٠١٤/٢٠١٣

Administrators		**Teachers**		**Students**		**Schools**		**Type of education**	
Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys		
13396	1997	32229	23227	351036	293966	1031	885	Mainstream	**Mainstreams Primary Schools in Riyadh**
109	36	1180	1217	2320	2924	112	98	Special education	

- **Number of Special Education Institutes (20 Governmental, 12 Local) Girls (25 Governmental, 1 Local)Boys**

RESOURCE ROOMS

Below are three photographs of typical resource rooms. It can be seen that they are brightly illuminated and colourful, use being made of warm primary colours, wall decorations, and comfortable furniture. Many are carpeted to reduce noise, though they are not illustrated in these pictures.